

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188
<p>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</p>			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED	
	28.Jul.99	THESIS	
4. TITLE AND SUBTITLE		5. FUNDING NUMBERS	
IN SUPPORT OF MILITARY LINGUISTS: INTEGRATING THE INTERNET INTO U.S. AIR FORCE LANGUAGE PROGRAMS			
6. AUTHOR(S)			
1ST LT VALENTINE SUSAN M			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)		8. PERFORMING ORGANIZATION REPORT NUMBER	
UNIVERSITY OF TEXAS AUSTIN			
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
THE DEPARTMENT OF THE AIR FORCE AFIT/CIA, BLDG 125 2950 P STREET WPAFB OH 45433		FY99-207	
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION AVAILABILITY STATEMENT		12b. DISTRIBUTION CODE	
Unlimited distribution In Accordance With AFI 35-205/AFIT Sup 1			
13. ABSTRACT (Maximum 200 words)			
<p>DISTRIBUTION STATEMENT A Approved for Public Release Distribution Unlimited</p>			
14. SUBJECT TERMS		15. NUMBER OF PAGES	
		83	
16. PRICE CODE			
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT

Abstract

In Support of Military Linguists: Integrating the Internet into U.S. Air Force Language Programs

Susan Mackey Valentine, M.A.

The University of Texas at Austin, 1999

Captain, USAF

Supervisor: Thomas J. Garza

This thesis examines the United States Air Force's (USAF) long-range goal of having ten percent of its officers proficient in a foreign language by the year 2005 and argues that current USAF programs are insufficient to reach this goal. The landmark and current literature in the field of foreign language education is reviewed in an effort to define what constitutes "proficiency" and to demonstrate that the Internet is a viable resource and vehicle for foreign language instruction. Finally, the author proposes a World Wide Web site designed to facilitate foreign language instruction for USAF officers. (83 pages)

19990804 198

Bibliography

Air Force Foreign Area Officer Program Home Page. (Feb 1, 1999). [World Wide Web site]. Air Force FAO/Language Proponent Office. Available: <http://www.hq.af.mil/af/saf/ia/afao/fao/index.htm> [May 28, 1999].

Air Force Instruction 36-2605. (17 June, 1994). United States Air Force. Available: <http://afpubs.hq.af.mil/pubsforms/pubs/af/36/36260500/36260500.pdf> [May 30, 1999].

Armstrong, K. M., & Yetter-Vassot, K. (1994). Transforming Teaching through Technology. *Foreign Language Annals*, 27(4), 475-486.

Bachman, L. F. (1987). *Problems in Examining the Validity of the ACTFL Oral Proficiency Interview*. Paper presented at the Symposium on the Evaluation of Foreign Language Proficiency, Indiana University, Bloomington, Indiana.

Bachman, L. F. (1990). *Fundamental Considerations in Language Testing*. Oxford: Oxford University Press.

Bailey, E. K., & Cotlar, M. (1994). Teaching via the Internet. *Communication Education*, 43(2), 184-193.

Baugh, I. W., & Baugh, J. G. (1997). Global Classrooms--E-Mail Learning Communities. *Learning & Leading with Technology*, 25(3), 38-41.

Beauvois, M. H. (1992). Computer-Assisted Classroom Discussion in the Foreign Language Classroom: Conversation in Slow Motion. *Foreign Language Annals*, 25(5), 455-464.

Berge, Z. L. (1994). Electronic Discussion Groups. *Communication Education*, 43(2), 102-111.

Bialystok, E. (1981). The Role of Conscious Strategies in Second Language Proficiency. *Modern Language Journal*, 65(1), 24-35.

Blyth, C. S. (1998). *Untangling the Web: St. Martin's Guide to Language and Culture on the Internet*. New York: St. Martin's Press.

Buck, K., Burns, H., & Thompson, I. (Eds.). (1989). *The ACTFL Oral Proficiency Interview Tester Training Manual*. Yonkers, NY: ACTFL.

Byrnes, H. (1987). *Features of Pragmatic and Sociolinguistic Competence in the Oral Proficiency Interview*. Paper presented at the Symposium on the Evaluation of Foreign Language Proficiency, Indiana University, Bloomington, Indiana.

Campbell, R., & Wales, R. (1970). The Study of Language Acquisition. In J. Lyons (Ed.), *New Horizons in Linguistics*. Harmondsworth, England: Penguin Books.

Canale, M. (1983). From Communicative Competence to Communicative Language Pedagogy. In J. Richards & R. Schmidt (Eds.), *Language and Communication*. London: Longman.

Canale, M., & Swain, M. (1980). Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing. *Applied Linguistics*, 1, 1-47.

Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, MA: M.I.T. Press.

Chun, D. M. (1994). Using Computer Networking to Facilitate the Acquisition of Interactive Competence. *System*, 22(1), 17-31.

Clark, J. L. D., & Clifford, R. T. (1987). *The FSI/ILR/ACTFL Proficiency Scales and Testing Techniques: Development, Current Status, and Needed*

Research. Paper presented at the Symposium on the Evaluation of Foreign Language Proficiency, Indiana University, Bloomington, Indiana.

Cohen, M., & Riel, M. (1989). The Effect of Distant Audiences on Students' Writing. *American Educational Research Journal*, 26(2), 143-159.

Colomb, G. G., & Simutis, J. A. (1996). Visible Conversation and Academic Inquiry. In S. C. Herring (Ed.), *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives* (pp. 203-222). Amsterdam: John Benjamins Publishing Company.

Falsetti, J., & Schweitzer, E. (1994). *SchMOOze University Home Page*, [Multiple Object Oriented interface]. The City University of New York. Available: <http://schmooze.hunter.cuny.edu:8888/> [Jun 10, 1999].

FLAMRIC. (1981). *Foreign Language Maintenance/Refresher and Improvement Course*. (August 1981 ed.). (Vol. 1-29). Presidio of Monterey, California: Defense Language Institute, Foreign Language Center, Distance Education Division.

Fox, G. (1998). The Internet: Making it Work in the ESL. *The Internet TESL Journal*, IV(9).

Frizzler, K. (1995). *The Internet as an Educational Tool in ESOL Writing Instruction*. Unpublished Master's Thesis, San Francisco State University, San Francisco.

Garza, T. J. (1998). *Tuchi: Video Laboratory Exercise*. University of Texas at Austin: Department of Slavic Languages and Literatures.

Hymes, D. (1972). On Communicative Competence. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics*. Harmondsworth, England: Penguin Books.

Jacobs, D. J. (May 18, 1999). *Most Investors Have Used the Internet*, [World Wide Web site]. Gallup Polls. Available: <http://www.gallup.com/poll/releases/pr990518b.asp> [May 30, 1999].

Jacobson, M. J., & Spiro, R. J. (1995). Hypertext Learning Environments, Cognitive Flexibility, and the Transfer of Complex Knowledge: An Empirical Investigation. *Journal of Educational Computing Research*, 12(4), 301-333.

Kern, R. G. (1995). Restructuring Classroom Interaction with Networked Computers: Effects on Quantity and Characteristics of Language Production. *Modern Language Journal*, 79(4), 457-476.

Korenman, J., & Wyatt, N. (1996). Group Dynamics in an E-Mail Forum. In S. C. Herring (Ed.), *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives* (pp. 225-241). Amsterdam: John Benjamins Publishing Company.

Kroonenberg, N. (1994). Developing Communicative and Thinking Skills via Electronic Mail. *Tesol Journal*, 4(2), 24-27.

L-SOFT list server at The City University of NY. (May 11, 1999). *Welcome to TESL-L!* (version 44), [e-mail discussion list] [May 24, 1999].

Lee, L. (1997). Using Internet Tools as an Enhancement of C2 Teaching and Learning. *Foreign Language Annals*, 30(3), 410-427.

Levy, S. (Dec. 25, 1995). The Year of the Internet. *Newsweek*, 26-30.

Lunde, K. R. (1990). Using Electronic Mail as a Medium for Foreign Language Study and Instruction. *Calico Journal*, 7(3), 68-78.

Ma, R. (1996). Computer-Mediated Conversations as a New Dimension of Intercultural Communication between East Asian and North American College Students. In S. C. Herring (Ed.), *Computer-Mediated*

Communication: Linguistic, Social, and Cross-Cultural Perspectives (pp. 173-185). Amsterdam: John Benjamins Publishing Company.

Mello, V. (1998). Report on a Penpal Project, and Tips for Penpal-Project Success. *The Internet TESL Journal*, IV(1).

Oliva, M., & Pollastrini, Y. (1995). Internet Resources and Second Language Acquisition: An Evaluation of Virtual Immersion. *Foreign Language Annals*, 28(4), 551-563.

Omaggio Hadley, A. (1993). *Teaching Language in Context*. (2nd ed.). Boston, Massachusetts: Heinle & Heinle.

Paramskas, D. (1993). Computer-Assisted Language Learning (CALL): Increasingly Integrated into an Ever More Electronic World. *Canadian Modern Language Review*, 50(1), 124-143.

Rankin, W. (1997). Increasing the Communicative Competence of Foreign Language Students Through the FL Chatroom. *Foreign Language Annals*, 30(4), 542-546.

Riel, M. M., & Levin, J. A. (1990). Building Electronic Communities: Success and Failure in Computer Networking. *Instructional Science*, 19(2), 145-169.

Salaberry, M. R. (1996). A Theoretical Foundation for the Development of Pedagogical Tasks in Computer Mediated Communication. *Calico Journal*, 14(1), 5-34.

Savignon, S. J. (1983). *Communicative Competence: Theory and Practice*. Reading, MA: Addison-Wesley Publishing Company.

SCOLA. (May 24, 1999). *SCOLA Home Page*, [World Wide Web site]. Satellite Communications for Learning (SCOLA). Available: www.scola.org [May 30, 1999].

Sheffner, M. (1999). *RE: Request for Internet Research*, [personal e-mail communication]. [May 25, 1999].

Supinski, S. (1999). Russian Language Maintenance Program Test: Working Papers. United States Air Force Academy: Colorado Springs, CO.

Valdman, A. (1987). *Introduction*. Paper presented at the Symposium on the Evaluation of Foreign Language Proficiency, Indiana University, Bloomington, Indiana.

Vygotsky, L. S. (1962). *Thought and Language* (Eugenia Hanfmann, Gertrude Vakar, Trans.). Cambridge, MA: M.I.T. Press.

Warschauer, M. (1995a). Comparing Face-to-Face and Electronic Discussion in the Second Language Classroom. *Calico Journal*, 13(2-3), 7-26.

Warschauer, M. (1995b). *E-Mail for English Teaching: Bringing the Internet and Computer Learning Networks into the Language Classroom*. TESOL Publications: Alexandria, VA.

Warschauer, M. (1997). Computer-Mediated Collaborative Learning: Theory and Practice. *Modern Language Journal*, 81(4), 470-481.

Zhao, Y. (1996). Language Learning on the World Wide Web: Toward a Framework of Network Based CALL. *Calico Journal*, 14(1), 37-51.

Copyright

by

Susan Mackey Valentine

1999

**In Support of Military Linguists: Integrating the Internet into
U.S. Air Force Language Programs**

by

Susan Mackey Valentine, B.S.

Thesis

Presented to the Faculty of the Graduate School of
The University of Texas at Austin
in Partial Fulfillment
of the Requirements
for the Degree of

Master of Arts

**The University of Texas at Austin
August 1999**

**In Support of Military Linguists: Integrating the Internet into
U.S. Air Force Language Programs**

**Approved by
Supervising Committee:**

Dedication

To Mom and Dad, who have always been my perfect models of success.

Acknowledgements

I would like to thank my supervisor, Dr. Tom Garza, who pushed, pulled, and dragged me – sometimes kicking and screaming – through the writing process, and my reader, Dr. Elaine Horwitz, whose classes and encouragement gave me the confidence to complete a project of this scope. Also, thanks go to Maj Stan Supinski, U.S. Air Force Academy, for suggesting the Internet as a topic and for his input throughout. Finally, many thanks to Curt Reese, UT graduate student, for his friendship and his contributions to my bibliography.

June 30, 1999

Abstract

In Support of Military Linguists: Integrating the Internet into U.S. Air Force Language Programs

Susan Mackey Valentine, M.A.

The University of Texas at Austin, 1999

Supervisor: Thomas J. Garza

This thesis examines the United States Air Force's (USAF) long-range goal of having ten percent of its officers proficient in a foreign language by the year 2005 and argues that current USAF programs are insufficient to reach this goal. The landmark and current literature in the field of foreign language education is reviewed in an effort to define what constitutes "proficiency" and to demonstrate that the Internet is a viable resource and vehicle for foreign language instruction. Finally, the author proposes a World Wide Web site designed to facilitate foreign language instruction for USAF officers.

Table of Contents

List of Figures	ix
Chapter 1: Introduction	1
Chapter 2: Defining and Measuring Proficiency.....	4
What Is Proficiency in a Foreign Language?	4
How Can Proficiency Be Measured?	10
The Air Force Standard of Proficiency	13
Chapter 3: Current Air Force Programs.....	16
Language and Area Studies Immersion (LASI) Training	16
The Defense Language Institute (DLI)	17
Tuition Assistance.....	18
The Foreign Language Maintenance/Refresher and Improvement Course (FLAMRIC)	19
Summary of Programs.....	25
Chapter 4: Using the Internet for Foreign Language Instruction	27
What is the Internet?	27
Who Uses the Internet?	31
Can the Internet Be Used for Language Instruction?.....	32
How Does One Go About Using the Internet for Foreign Language Instruction?	34

Chapter 5: Russian University – an Interactive World Wide Web Site.....	42
THE UNITED STATES AIR FORCE'S RUSSIAN UNIVERSITY	45
“Cyrillicize” Your Computer.....	47
Video / Audio Clip of the Week.....	48
Article of the Week.....	51
Grammar Topic of the Week.....	55
Chat Room and the Electronic Bulletin Board	56
Collaborative Projects	57
Peer Newspaper	58
Links to Russian Resources on the Internet	59
Grammar and Vocabulary Games.....	60
Keypals and the Discussion List.....	61
Suggestion Box	62
Assessing Your Progress: Mock DLPTs	63
Chapter 6: Conclusion.....	65
Directions for Further Research.....	65
Appendix A	69
Reading Comprehension	69
Listening Comprehension.....	70
Appendix B	74
Bibliography.....	77
Vita	83

List of Figures

Figure 1: Communicative Language Ability.....	8
Figure 2: Language Competence.....	9
Figure 3: Comparison of ACTFL and ILR Rating Scales	15
Figure 4: Russian University Home Page	45
Figure 5: First Time Visitors	46
Figure 6: Video Clip of the Week	49
Figure 7: Article of the Week.....	52

Chapter 1: Introduction

In today's volatile world, the leadership of the United States Air Force (USAF) is coming to realize that to understand and relate to both our allies and our opponents, it is critical we have a large pool of officers who are proficient in foreign languages upon which to call in the course of normal day-to-day operations, as well as in times of emergency. This need for trained foreign area specialists has recently been defined in an ambitious goal statement in the Air Force Long Range Plan End State #10-7 which asserts,

By the year 2005, 10% of all Air Force officers are proficient in languages needed to support GLOBAL ENGAGEMENT and US global interests and responsibilities. These officers become knowledgeable in political-military, economic, and cultural aspects of the country or region associated with that language (Air Force Foreign Area Officer Program Home Page, 1999).

Striving toward this far-reaching goal, in 1997, the Air Force established a new duty title of "Foreign Area Officer (FAO)." This secondary job title is awarded by the FAO selection board to officers with superior cultural and linguistic skills in a particular region, and serves to help designate highly proficient area specialists upon which the Air Force may draw for duties such as attaché, personnel exchange programs, Joint Staff duties, etc. The Air Force has also allocated funds to the new FAO/Language Proponent office to provide month long in-country immersion training to some officers (Air Force Foreign Area Officer Program Home Page, 1999).

Having clearly defined the need for a large body of Air Force officers to be culturally knowledgeable and language proficient, several questions remain. First, what exactly is the Air Force definition of language "proficient" and how does that definition fit into the larger context of the so-called "proficiency movement" currently underway in the general field of foreign/second language education. Second, once the goals for proficiency are established, what steps is the Air Force taking to train its officers to meet these demands? Finally, what resources are currently available to individual officers that can help them independently achieve and maintain the Air Force's stated proficiency goals when they are not engaged in any type of formal language class?

In the chapters that follow, all three of the above questions are addressed. However, the main purpose of this paper is to argue that current Air Force programs do not provide officers with adequate opportunity to further develop their linguistic and cultural knowledge, and to suggest a model for using the Internet to fill this need. The proposed model, if implemented, would primarily assist military linguists who fall under the category of the third question: those who are currently performing their regular duties, but would like to maintain and improve what language skills and cultural understanding they already have, right where they are.

In chapter two, this paper defines the Air Force's expectations of "proficiency" as they relate to the current "proficiency movement" in foreign language instruction. Chapter three provides an overview of the resources currently available to Air Force linguists, including the FAO program and the

text-based Foreign Language Maintenance/Refresher and Improvement Course (FLAMRIC), and discusses the positive and negative aspects of each. The reader should note that in U.S. government services, including the military, the term "linguist" refers to any individual with expertise in a foreign language; i.e., some level of proficiency. Because this thesis centers around military personnel, the author uses the term "linguist" in the military or government sense of the word throughout the paper.

Next, chapter four reviews the literature on whether, and how, the Internet may be used to facilitate foreign language and culture acquisition. The chapter begins by defining some important Internet related terminology, then briefly discusses the prevalence of this relatively new technology. The literature covering a variety of features of the Internet, including e-mail, listservs, MOOs, etc., is investigated in some detail, followed by a discussion of how this technology is currently being used with success by educators in the foreign language field.

Following this literature review, putting into practice the theories and principles investigated, chapter five introduces a plan for an interactive, multi-media World Wide Web site which, if implemented, would help bridge the gap for those linguists who are not currently involved in formalized training, as well as provide a resource for use by training program instructors. Finally, chapter six concludes the paper by summarizing and proposing directions for further research.

Chapter 2: Defining and Measuring Proficiency

As stated in the Introduction, the U.S. Air Force has the long range goal of having ten percent of its officers language proficient by the year 2005. In order to define this goal more clearly, one must understand what exactly is meant by the term “proficient?” This definition has long been an important topic of debate in the field of foreign language and second language instruction. This chapter reviews some of the history of the “proficiency” debate, discusses the guidelines generally accepted by the American Council on the Teaching of Foreign Languages (ACTFL), compares that standard with the standard currently in use by the U.S. Air Force, and briefly outlines the measures the U.S. Air Force uses to determine whether or not an officer meets these standards.

WHAT IS PROFICIENCY IN A FOREIGN LANGUAGE?

Understanding that foreign language acquisition is an incredibly complex learning task involving a combination of a vast array of skills and knowledge areas, how can we determine whether or not an individual has achieved proficiency? Omaggio Hadley (1993, p. 2) begins her discussion of this topic by stating very generally that proficiency refers in a broad sense to an idealized level of competence and performance, attainable by experts through extensive instruction.

In his theoretical writings, Chomsky (1965) broke down a similarly general definition into the distinction between “competence,” one’s implicit and explicit knowledge of the system of the language, and “performance,” one’s ability to produce and comprehend the language during instances of actual language use. This distinction is an important consideration when attempting to define proficiency because speakers (both native and non-native) constantly face such production hindrances as distractions, shifts of attention, errors in knowledge application, etc.; thus, performance alone is not necessarily an accurate measure of competence (Chomsky, 1965, p. 3).

Campbell and Wales (1970) agreed with the distinction Chomsky made between grammatical performance and competence, but broadened the definition significantly by noting that one must also achieve some understanding of the appropriateness of the language to the specific situation or context, thereby coining the term “communicative competence.” Agreeing with them, Hymes (1972) noted that it was indeed necessary to incorporate sociolinguistic and contextual competence, stating that Chomsky’s grammatical competence was only one component of overall language knowledge. Their contemporary, Savignon (1983), refined her earlier views of communicative competence by stating that communication depends on negotiation—it is interpersonal rather than intrapersonal—and depends on the cooperation of everyone involved. If this is the case, the competent linguist should be able to make adjustments in register and style based on the audience or situation. She also underscored Chomsky’s

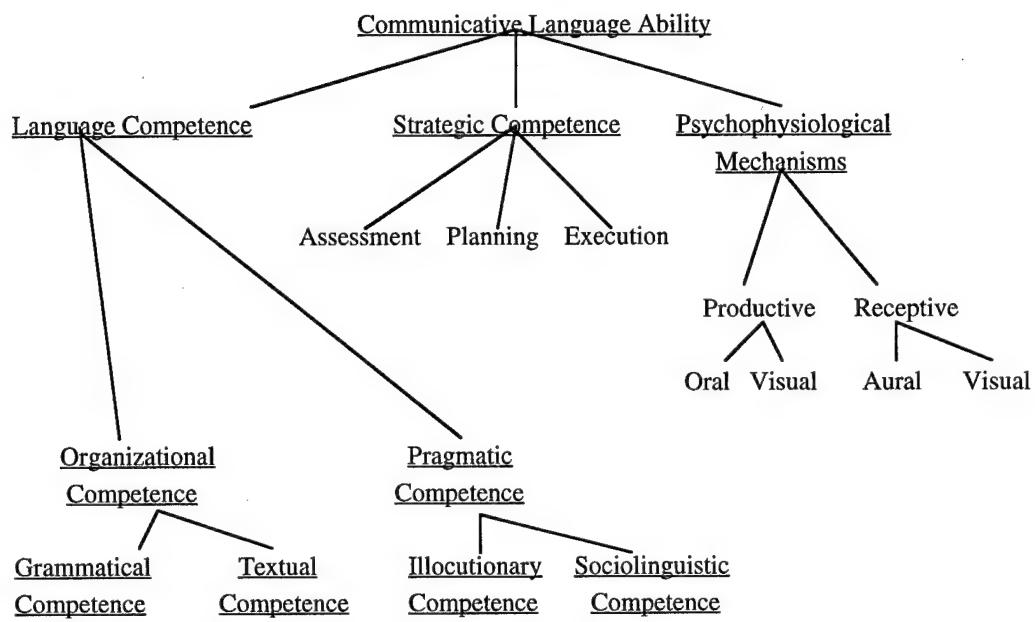
distinction between performance and competence, noting that the difference is what one does as opposed to what one knows (Savignon, 1983, p. 8-9).

Building on the work of the above mentioned researchers and others, Canale and Swain (1983; 1980) created a model of communicative competence for foreign languages. Their definition included four major components: 1) grammatical competence -- the degree to which the learner has mastered the linguistic code of the target language; 2) sociolinguistic competence -- how well and how appropriately grammatical forms are applied and understood in various contexts with specific communicative functions in mind; 3) discourse competence -- the combination of ideas to achieve cohesive forms and coherence in thought; and 4) strategic competence -- the use of compensatory circumlocution or other verbal and non-verbal strategies to facilitate communication when the learner's performance or knowledge breaks down.

A later similar model introduced by Bachman (1987), broke the definition of proficiency down into three major components: 1) language competence; 2) strategic competence; and 3) psychophysiological mechanisms. The relationship between communicative language ability and these components is demonstrated in Figure 1. Note that language competence is further broken down into the categories of organizational competence and pragmatic competence (see Figure 2). Grammatical and textual abilities are considered organizational, and include structural rules of lexis, syntax, word choice, knowledge of the conventions of cohesion, the ability to join utterances together to form a text, etc. Pragmatic competence includes illocutionary and sociolinguistic competencies, such as the

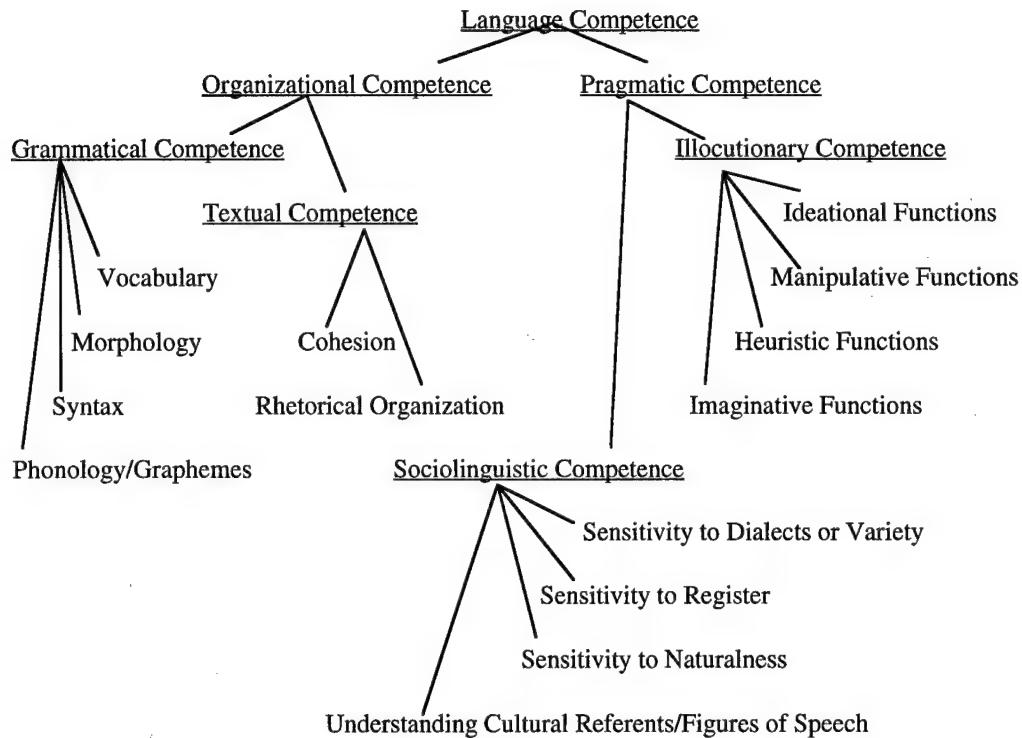
knowledge of how language functions or knowledge of the sociolinguistic conventions governing appropriate cultural and contextual language usage. Psychophysiological mechanisms are defined by modality (receptive/productive) and channel (auditory/visual), with sensory mechanisms employed in the receptive mode (listening/reading) and motoric mechanisms employed in the productive mode (speaking/writing). Finally, strategic competence involves the dynamic interchange between the learner, the discourse, and the context. In other words, it is the ability to assess the context for new information relevant to the conversational goal and then match the discourse to this information.

Figure 1: Communicative Language Ability



Source: (Bachman, 1987)

Figure 2: Language Competence



Organizational Competence:

Grammatical Competence: Controlling the formal structure of language

Textual Competence: Knowing how to construct discourse

Pragmatic Competence:

Illocutionary Competence: Functional use of language

Ideational Functions: To express ideas and emotions

Manipulative Functions: To get things done

Heuristic Functions: To use language to teach, learn, solve problems

Imaginative Functions: To be creative

Sociolinguistic Competence: Knowledge of appropriateness to context

Source: (Bachman, 1990)

Over the years, the definition of language competency has gradually moved away from simply how structurally accurate the learner's performance is toward an understanding that language ability in the four skills must be defined in terms of the various components that must be developed in order to know a language well enough to *use* it for communicative purposes. Omaggio Hadley put it this way:

In the past twenty years, many teachers have come to understand that language proficiency is not a monolithic concept representing an amorphous ideal that students rarely attain; rather it is comprised of a whole range of abilities that must be described in a graduated fashion in order to be meaningful (Omaggio Hadley, 1993).

HOW CAN PROFICIENCY BE MEASURED?

In light of the above research, it becomes exceedingly clear that measuring proficiency is a highly complex undertaking. In answer to this daunting task, in 1986, the American Council on the Teaching of Foreign Languages established a graduated list of criteria and descriptors defining functional competence in a foreign language based on performance in the four skills. These standards were established in an attempt to institute a national metric based on demonstrated functional proficiency in a foreign language and, more importantly, to ensure that achievement is defined by functional usage as opposed to exposure to and command of any specific body of material (Valdman, 1987). Byrnes (1987), in her presentation to the Symposium on the Evaluation of Foreign Language Proficiency, made it clear that even though the rating scale was established to

measure functional performance, content, and accuracy of production, its underlying motivation derives from the sociolinguistic features of appropriateness and acceptability, in keeping with the theoretical descriptions of proficiency discussed in the previous section of this chapter. However, she recognized that there must be a distinction between the “theoretically ideal and the practically feasible.” The rating scales were established and revised with that distinction in mind.

The ACTFL Proficiency Guidelines

The ACTFL Proficiency Guidelines use a system of global level ratings (from 0 to 5, 5 being the highest and indicating educated native proficiency) assigned for each of the four skills (reading, writing, listening, and speaking) by evaluating samples of performance using a set of interrelated criteria (Omaggio Hadley, 1993, p. 13). It should be noted that the linguistic competence required to progress up the scale increases geometrically with each level attained. That is to say, progressing from the intermediate to the advanced level requires an exponentially larger gain in skill than progressing from the novice to the intermediate. (See Figure 3 in the next section for the relationship between skill levels and number ratings). The five interrelated criteria underlying the ACTFL rating system are global tasks/functions, context, content, accuracy, and text type (Omaggio Hadley, 1993, pp. 15-18).

Global tasks are real-world tasks the learner is able to perform. For example, the lowest ratings would be able to perform simple greetings,

intermediates could describe people and places, and advanced ratings would be able to perform extended narrations in varying time frames.

Context refers to the situations in which the language user may find himself/herself. Novices would only be able to handle situations that require low-level, memorized responses, such as ordering food from a limited menu. Those rated at the higher levels would have to be much more flexible due to the unpredictability of circumstances. These tasks might range from arguing their opinions in a political debate to handling unexpected difficulties caused by cultural differences.

Content is the most variable element of the five criteria, and refers to the topics or themes of conversation. During oral interviews, the range of topics depends on the background and interests of the person being interviewed. Each topic can cover the range of proficiency levels by simply increasing the detail and complexity of the discourse. For example, a novice would be able to name the members of his family, an intermediate could briefly describe them, and an advanced speaker could recount in detail family events or talk about future plans. The highest levels would concentrate on more abstract issues, such as how cross-cultural issues effect the role of the family in society.

Accuracy is the measure of the acceptability, quality, and precision of the message conveyed. Issues under this criterion include vocabulary, grammar, fluency, pragmatic competence, and sociolinguistic competence.

Finally, text type refers to the structure of the discourse. Does the speaker answer in single words, complete sentences, paragraphs, or extensively organized and sequenced discourse?

What Rating Scale Does the Air Force Use?

The rating scale used by the Air Force is the ILR (Interagency Language Roundtable) scale on which the ACTFL, in large part, based their research when developing the 1986 version of the ACTFL rating scales. Under the Air Force system, listening and reading comprehension are measured by tape-and-booklet based objective tests (the Defense Language Proficiency Tests or DLPT) (Clark & Clifford, 1987). The ILR scale is very similar to the ACTFL scale described above, with a few notable exceptions. The ILR scale uses an 11-point scale (from 0 to 5, with pluses added), while the ACTFL scale breaks down the lower skill levels further, but compresses the upper ranges. Figure 3 (Buck, Burns, & Thompson, 1989) illustrates these differences.

THE AIR FORCE STANDARD OF PROFICIENCY

Based on the theoretical descriptions of proficiency as outlined in this chapter and measured by the ILR Scale, the Air Force has determined proficiency for the purposes of inclusion in the Foreign Area Officer program is defined as the achievement of a score of 2/2 (Reading/Listening) on the Defense Language Proficiency Tests (Air Force Foreign Area Officer Program Home Page, 1999).

Air Force Officers are required to retest annually in both reading and listening comprehension to prove that the required language skills are being maintained.

In order to score at level 2 proficiency on the DLPT in reading, the student would need to be able to read simple authentic written texts at or beyond paragraph length on familiar subjects. The types of texts the student should be able to understand include factual descriptions, narrative reporting by a neutral author, instructions, directions, and other material addressed to less experienced native speakers. The student understands the facts only. In other words, the student can read the lines but not between or beyond the lines (Air Force Foreign Area Officer Program Home Page, 1999; Air Force Instruction 36-2605, 1994).

The level 2 listener would be able to understand conversations about routine social demands and some job requirements. S/He should be able to understand face-to-face conversations in a standard dialect at normal rate-of-speech with some repetition by native speakers who are not used to dealing with foreigners on a regular basis. The listener's range of understandable topics would include everyday subjects, such as personal or family news, well-known current events, and some routine office matters discussed in past, present, or future tense. However, s/he would have difficulty understanding speech in unfavorable conditions (e.g., outdoors over a loudspeaker) (Air Force Foreign Area Officer Program Home Page, 1999; Air Force Instruction 36-2605, 1994).

For a more detailed description of the tasks measured at each skill level by the DLPT for both reading and listening comprehension, see Appendix A.

Figure 3: Comparison of ACTFL and ILR Rating Scales

ACTFL Scale	ILR Scale
	(5) Native or bilingual Proficiency (4+) (4) Distinguished Proficiency (3+)
Superior	(3) Professional Working Proficiency
Advanced High	(2+)
Advanced	(2) Limited Working Proficiency **
Intermediate High	(1+)
Intermediate Mid	(1) Survival Proficiency
Intermediate Low	
Novice High	(0+)
Novice Mid	(0) No practical Proficiency
Novice Low	

** - the minimum proficiency required to be eligible for the Air Force FAO program.

Source: (Buck et al., 1989)

Chapter 3: Current Air Force Programs

The previous chapter investigated how some foreign language educators, as well as the Air Force, define proficiency in a foreign language. The Air Force has set the standard of achieving a score of "2," as defined by the ILR scale, in both listening and reading comprehension and tested annually using the Defense Language Proficiency Test series. Now that the minimum skills required of officers in order to meet the Air Force standard of proficiency have been determined, and as a precursor to discussing how the Internet may help officers achieve these goals, this chapter provides a brief overview of the programs currently available to help officers acquire and maintain foreign language proficiency.

LANGUAGE AND AREA STUDIES IMMERSION (LASI) TRAINING

Under this new program, Air Force officers are sent to study in the country where the target language is spoken, with native speaker instructors. Participants in the training are determined by a selection board and are required to have at least a "1/1" DLPT score before applying to the board (Air Force Foreign Area Officer Program Home Page, 1999). Once selected, participants agree to speak only in the target language while in the country. Participants are generally lodged in the homes of target country residents, if possible. Obviously, the sheer amount of target language encountered and the requirement for constant usage in order to

communicate even basic needs make this the ideal scenario for target language acquisition. However, there are a few significant drawbacks to this program.

Firstly, sending participants to live in the target countries is very expensive for the Air Force. Therefore, very few linguists are selected to go and, once selected, these linguists only remain in the country for thirty days – a very short time in which to make significant progress in a language. Additionally, the limited amount of money available to finance the LASI program forces the Air Force to include only those languages in which it suffers the most critical shortages – usually less commonly taught languages, such as Russian, Korean, Chinese, and Arabic.

Secondly, sending an officer away from his or her primary duty location, even for a month, could be disruptive to that unit's day-to-day functioning. For those thirty days, the officers selected for the program are completely unavailable for the performance of their primary missions.

Thirdly, even if a linguist makes significant progress during his or her month in-country, the LASI program does not make provisions for follow-up training once the officer returns to his or her primary duty location. Unfortunately, language skills quickly acquired can just as quickly atrophy.

THE DEFENSE LANGUAGE INSTITUTE (DLI)

DLI, located at the Presidio of Monterey, California, is a school run by the U.S. Army devoted almost exclusively to the training of military linguists. While attending DLI, the military member's primary duties consist of attending classes

taught mainly by native speaker instructors, studying the language, and completing any required homework assignments. The DLI duty day is an experience in near-total immersion training in the target language. Like LASI, DLI provides great opportunities for the linguist. However, once again, expense and the need of the Air Force to have its officers available for their primary duties make study at DLI a rarity. So rare, in fact, that only officers already selected to fill a Language Designated Position (a position that requires language proficiency for the performance of primary duties) may attend (Air Force Foreign Area Officer Program Home Page, 1999).

TUITION ASSISTANCE

The next resource for language training available to the would-be linguist is tuition assistance. This program allows the service member to pay only twenty-five percent of the total tuition costs for language courses, with the Air Force paying the remaining seventy-five percent (Air Force Foreign Area Officer Program Home Page, 1999). The string attached to this financial assistance is that the officer must agree to an additional two-year service commitment after completion of the course or courses for which the service member received tuition assistance. The student is also responsible for the cost of books. One other difficulty associated with this option is location. Many Air Force duty assignments are remotely located, where there are no colleges or universities nearby to make language courses readily available, especially courses in the less commonly taught languages.

THE FOREIGN LANGUAGE MAINTENANCE/REFRESHER AND IMPROVEMENT COURSE (FLAMRIC)

FLAMRIC (1981) was designed to provide support for linguists upon completion of a basic language course at DLI. However, this compilation of exercises and readings is also available free of charge to any military linguist who demonstrates similar language experience. For the purposes of this paper, the author will examine the Russian version of FLAMRIC in more detail. The most recent version of Russian FLAMRIC, dated 1981, was compiled from a variety of government publications, including DLI and National Security Agency course work, to aid linguists in forwarding their general language skills, as well as more specific knowledge of the vocabulary and language usage associated with the performance of specific military duties. Examples of the materials catering to specific military functions would include the block covering nuclear and biological weaponry or the material covering radio communications.

The Russian FLAMRIC Manual of Administration (1981, v. 1, p. 2) claims that upon completion of this course, which consists of a fifteen-inch stack of workbooks weighing over thirty-two pounds and the accompanying cassette tapes, the linguist will be able to:

1. conduct interviews and interrogations, debrief detainees or evacuees, or act as an interpreter;
2. deal with minor problems arising from the above situations;
3. read and translate both civilian and military texts and render concise gists of the texts;

4. provide verbal or written summaries of voice intercepts concurrently or in minimum time;
5. translate military-technical printer matter;
6. provide technical knowledge to assist interrogation personnel, if required.

To accomplish these objectives, FLAMRIC provides twenty-nine volumes of materials, divided into three major blocks: grammar, military, and enrichment. These blocks are intended to help a student progress from level “1” to level “3” in all four skills.

In the nine-volume grammar block, the student will encounter four types of exercises: repetition, choice of form, substitution drill, and closure. The repetition drills are simply that. The student plays sentences recorded on the cassette tapes, follows along in the workbook, and repeats what s/he hears or places the sentence parts in order according to the given pattern. These exercises are intended to reinforce grammatical patterns and pronunciation through modeling and simple repetition.

Cassette: У меня (pause) ваша книга.

I have **your book.**

Student: Ваша книга у меня.

Your book is with me.

Choice of form exercises and substitution drills are intended to reinforce declension and conjugation. For the choice of form exercises, the noun or verb is provided for the student in the text and on the cassette, and the student must fill in the correct form for each sentence.

Cassette/book: Я (pause) Он был у ...

I He was at...

Student: Он был у меня.

He was at my place.

For the substitution drills, the student is given a phrase and a word to substitute into the phrase.

Cassette/book: Здесь нет доктора. (pause) наш

There's no doctor here. our

Student: Здесь нет нашего доктора.

Our doctor's not here.

Cassette/book: Ваш

Your (plural)

Student: Здесь нет вашего доктора.

Your doctor's not here.

Closure drills are included as verb control exercises. Verbal aspect pairs in the infinitive form, as well as first and second person singular forms, are provided and the student is asked to fill in the blank in a sentence by choosing the correct aspect and conjugating the verb.

Понимать -аю, -ешь; понять пойму, ёшь -- to understand

Скажите это по-русски, и я вас

Say it in Russian and I will understand you.

The student fills in the word пойму.

The volumes intended for intermediate and advanced learners provide similar types of exercises based on modeling and fill-in-the-blank, but focus on more advanced grammatical issues, such as verbs of motion, word formation, and syntax. As the learner enters the higher level tasks, the exercises also begin to be slightly more contextualized. For the first three volumes, the context provided is never more than one sentence, while in the latter volumes, occasionally a few sentences are grouped together. However, the more extended contextualization is rare throughout the course material. One must also bear in mind, that even when a short context is provided, the most recent version of Russian FLAMRIC was published in 1981; therefore, all readings and exercises are based on life and experiences in the Soviet/Cold War society. For example, sentences referring to the Soviet Union are common:

(from grammar block 7, p. 89)

вне – outside; outward, external (foreign)

Мы изучаем политику Советского Союза.

The student is expected to fill in the adjectival form of the word with the root **-вне-**, in this case **внешнюю**.

Although the Manual of Administration espouses the language teacher must always “explain a point of grammar in relation to a text,” which would be in keeping with the principles of content-based instruction and the communicative approach to language study, the grammar block is little more than short grammar explanations followed by volumes of poorly contextualized drills. While these drills may be useful in practicing accurate grammar usage, they tend not to be in

keeping with current communicative-learning and teaching practices, and due to their repetitiveness, can easily become tedious for the learner. Additionally, due to the age of the publication, much, if not most, of the cultural information implicit in the exercises is useful only from a historical perspective. This lack of current information becomes an even more critical failing when one examines the military and enrichment blocks.

The Military Block

The military block consists of a phrasebook of military terminology and readings based on general military vocabulary, as well as more specific technical vocabulary in the latter volumes. There is also a volume on meteorology. In these volumes, FLAMRIC provides military-specific vocabulary lists followed by extended readings using the vocabulary just presented. This block provides the contextualization largely absent from the grammar exercises. However, while FLAMRIC claims the military topics presented will interest members of all four branches of military service, the readings and vocabulary are heavily oriented toward Army and ground troop issues, such as tanks, infantry, and artillery. Although these topics may be useful to certain Air Force officers in special situations, topics that would be of broader interest, such as aircraft, space, and missile terminology, are virtually absent. Along the same lines, FLAMRIC is predictably devoid of material regarding the most modern computer technologies. For example, an officer relying exclusively on FLAMRIC for foreign language maintenance would have no exposure whatsoever to Russian language materials

discussing the Internet, the Global Positioning System (GPS), or any other technology that has become prevalent within the past decade. Additionally, the readings on the structure and operation of the Soviet military are obviously fraught with the same problem – they are clearly out-of-date due to the time of publication.

The Enrichment Block

The ten-volume enrichment block will undoubtedly prove the most valuable to the learner striving for communicative competence. Within these volumes, the learner will find hundreds of pages of Cyrillic text, including a number of authentic short stories and poems by Soviet authors. While the volumes on the economy, the land, and the people of the Soviet Union are every bit as antiquated as the military and grammar blocks, this deficiency has little effect on the value of the volumes concerning the history of Russia, its geography, and the history of Russian language and literature. The final volume in the series consists of recorded and transcribed dialogs in a variety of situations, (e.g., at a hotel, at the airport, etc.) at both normal and slow rates-of speech, which may be used to facilitate listening comprehension at the lower and intermediate skill levels. It also contains twelve discussions about family life, the military, schools, etc. in the USSR. These discussions are at normal rate of speech and are not transcribed, but several questions and answers (in Russian) addressing the main points of each conversation are included. These recorded dialogs and conversations provide opportunities for good listening practice provided that the

learner bears in mind the age of the recordings and recognizes that many of the cultural references are no longer valid. Although this block could be improved by the inclusion of some well constructed pre- and post-reading and listening tasks, the sheer volume of Russian text, as well as the authentic literary samples, should prove useful if the learner is self-motivated enough to read and study them without the aid of any advance organizers.

SUMMARY OF PROGRAMS

This chapter has outlined the programs currently available to aid the officer who is striving to meet or maintain the proficiency levels set forth by the Air Force. These options include participation in LASI, a tour of duty at DLI, tuition assistance, or the use of FLAMRIC. Unfortunately, while the first two options, LASI and DLI, potentially offer great benefits, they are highly selective, expensive for the Air Force, and do not allow the officer to perform his or her primary duty concurrently. Tuition assistance requires large investments from the language learner, both monetarily for tuition and books and in time owed to the Air Force. In addition, the remote locations of many Air Force postings eliminate this option for those linguists unable to locate nearby classes in their language. Finally, FLAMRIC is the only option widely available at no cost to the linguist. While it may offer extensive grammar drills and some good authentic reading and listening materials, it is clearly not based on current foreign language teaching theory or practice and, as the materials included are nearly twenty years out of

date, they do not reflect the social, political, and economic issues facing Russia today.

The next chapter reviews the current literature to determine if the Internet is a viable resource to offer a solution to the aforementioned problems of expense, availability, and currency.

Chapter 4: Using the Internet for Foreign Language Instruction

Now that the need for better support for linguists not involved in on-going language training has been established, this chapter reviews the literature in order to answer the question of whether or not the Internet is a viable alternative to the options currently available.

WHAT IS THE INTERNET?

Before beginning any discussion on the use of the Internet for foreign language acquisition, several technical terms used in this paper must be defined. The general descriptions which follow will aid the reader in understanding references to specific functions of the Internet, while their meanings will become clearer as the paper progresses through examples of their usage (Berge, 1994; Frizzler, 1995; Warschauer, 1997; Zhao, 1996).

Electronic Mail (E-mail):

The electronic “postal system” which allows users to create “mail” messages and send them electronically to distant addressees. This type of communication is asynchronous, meaning that the writer and reader do not have to be on-line at the same time.

File Transfer Protocol (ftp):

A standard protocol that allows users to transfer files from their computer hard drive or other storage media (upload) onto the Internet or to download files

from other connected computers. For example, a user may type an e-mail message using a word processor or mail program, then upload it to the Internet to be sent to the addressee, then receive (download) his/her own messages from an account located on a distant server.

Chat rooms (IRC—Internet Relay Chat):

Synchronous written “conversation” via the Internet between users on-line at the same time over any topic of choice, often simply small-talk. Similarly, a program such as “Daedalus” may be used to link a smaller number of computers together into a Local Area Network (LAN), forming an intranet chat room. In this scenario, the entire group of users (for example, a foreign language class) is co-located within a single classroom or computer laboratory, and simultaneously uses the networked computers to “chat” textually instead of orally.

Discussion Groups or Listservs:

Each user sends an e-mail subscribing to a discussion group on a topic of interest. Then, an electronic listserv acts as a clearinghouse to forward messages received from subscribers asynchronously via e-mail to everyone on the subscription list. Members may either address the group as a whole through the list’s e-mail address, or personally respond to individual postings via the individual’s e-mail address, which is typically included in postings.

Usenet:

Usenet is similar to a listserv discussion group except that while the listserv sends e-mail to private mailboxes, Usenet sends postings to a newsreader.

Because the user is not receiving individual e-mail, s/he does not have to delete unwanted postings.

Electronic Bulletin Boards (BBS):

A means of posting asynchronous messages to be read and responded to by a large group of people. These messages are sorted and read in streams, meaning that although several topics are under discussion, each new posting is connected by subject matter so that the sequence of the conversation is maintained. Bulletin Boards may either be public (open to all Internet users) or private (open only to a specific group, i.e., a class).

MOOs (Multiple Object Oriented interfaces) or MUDs (Multi-User Dimensions):

Systems by which Internet users may spontaneously and synchronously navigate through a “virtual reality” environment, using text to converse with other users, describe their surroundings, and negotiate movement through their virtual world in real-time. For example, a virtual visitor to the SchMOOze University (Falsetti & Schweitzer, 1994) may create his or her own dormitory room by textually describing it in detail. Other users may then visit this dorm room, and following proper netiquette (Internet etiquette), knock, gain entrance, and explore this new “room” or “talk” to its inhabitant – all by entering textual commands and descriptions.

Telnet:

Users may connect to distant servers, such as museums or libraries, and view available resources. These servers often allow downloading of software or documents through ftp.

Hypertext:

Users negotiate through a network-like structure of discrete pages of information using simple mouse clicks on pointers (links) set up to allow non-linear and flexible access to related informational units. For example, one may visit a book seller's home page and find links to fiction, literature, music books, history books, etc. A mouse click on any of these links will take the user directly to the chosen page. The links may be accessed in any order, or not at all, at the user's option.

World Wide Web (WWW):

A worldwide, constantly changing "library" of pages of text, graphics, audio, and video connected through keyword links (hypertext). Through the WWW, users can access documents in virtually any world language, then connect to other related documents anywhere in the world by a simple mouse click on the keyword or phrase link. Through the World Wide Web, the entire world is literally at the user's fingertips. By accessing Web sites, the user may tour the Louvre museum in France, learn how to prepare tamales from a recipe in a Spanish language cookbook, or look through a birds-eye view camera to watch the activities on a street in St. Petersburg, Russia in near real-time.

WHO USES THE INTERNET?

Now that a working technical vocabulary has been established, a brief discussion of the prevalence of this relatively new technology is in order. According to an article published in *Newsweek* by Levy (1995), the Internet and the World Wide Web were not widely used or even recognized by the general public prior to 1995. However, the number of sites on the Web is growing at a phenomenal rate—in fact, it is doubling in size every fifty-three days! With so much to see, it was understandable when Jerry Yang, cofounder of the popular Internet search engine Yahoo!, stated, "...there's a million visitors a day here." Paul Moritz, a Vice President of Microsoft, describes the WWW as, "opening up communication to the masses," while futurist Paul Saffo is quoted as saying, "The Internet mediates human interaction better than any other medium. Getting in touch with each other is more fun than the coolest computer game." (Levy, 1995). Since that time, the growth in popularity of the Internet has been so significant that in a recent survey of American investors by Gallup Poll, an astounding eight out of ten investors (79%) under the age of fifty stated they have used the Internet (Jacobs, 1999) -- an incredible vote of confidence for a technology that began to blossom a mere five years ago. Undoubtedly, as computer prices continue to drop and new technologies for accessing the Internet, such as WebTV, gain popularity, it will become even easier for the general public to gain access to the wealth of information and virtual worlds available through the World Wide Web from their own living rooms and dens.

CAN THE INTERNET BE USED FOR LANGUAGE INSTRUCTION?

Clearly, accessing the Internet is no longer a novel idea to an ever-growing segment of the American population. Since the technology is fast becoming readily available, the next question that must be answered in order to determine if the Internet is a viable resource for use by linguists is clearly: is the Internet an effective tool for foreign language instruction?

In his book, *Untangling the Web*, Blyth (1998) answers the question this way:

The Internet is a new and rapidly growing context for cross-cultural communication, and its potential impact on the study and teaching of foreign languages is mind-boggling. For many American students, it is already more common to encounter a foreign language on the Internet than anywhere else. So it makes sense then to study a language in the context in which it is used, including the context of cyberspace (Blyth, 1998, p. ix).

Indeed, from a sociocultural perspective, the opportunities for social interaction with both language learning peers and native speakers that are available as never before through chat rooms, MOOs, discussion lists, and so forth can potentially create an ideal environment to learn language, learn about language, and learn “through” language (Warschauer, 1997). Further, the Internet facilitates Vygotskyan-style collaborative learning, either between learners or among students and teachers, in ways that were never before possible. Suddenly, the Internet savvy language learner may easily gain access to both native speakers of the language s/he is studying, as well as access to other language learning peers, both more and less advanced in the language. Through e-mail, MOOs, chat

rooms, etc., the learner may work cooperatively on a variety of projects with these native speakers and/or language learning peers, synchronously or asynchronously, no matter where in the world they are located. Through this interaction, the collaborative learning essential for assisting the language learner in advancing through what Vygotsky describes as his or her zone of proximal development (the gap between what a learner could accomplish alone and what s/he could accomplish in collaboration with others who are more skilled or experienced) has the opportunity to take place (Vygotsky, 1962; Warschauer, 1997). These types of collaborative efforts are uniquely suited to the Internet due to the fact that the Internet virtually eliminates the difficulties of time zone and location encountered when using more traditional methods of communication.

Salaberry (1996) asserts that there are two major positive effects of the types of true social interaction to be gained via the Internet on the L2 learning process: an increased awareness of the sociocultural nature of the target language, and the development of situated cognition (or pragmatic competence from the Chomskyan paradigm). Most importantly, group or collaborative learning generates the types of information exchanges that require the learners to engage in conversational comprehension strategies, such as requests for clarification, confirmation, and comprehension checks. These strategies ensure that the input will be comprehensible (a requirement for language learning from the Krashen paradigm).

In general, the answer in the literature as to whether the Internet can be used for foreign language education is a resounding "yes," provided, of course, that the learner knows how to make use of this extraordinary resource.

HOW DOES ONE GO ABOUT USING THE INTERNET FOR FOREIGN LANGUAGE INSTRUCTION?

Because the technology is so new, qualitative and especially quantitative studies on the efficacy of using various aspects of the Internet for language acquisition are sparse at best. In the quest for resources for this thesis, the author posted queries to several large discussion groups. One fairly typical comment received from a colleague responding to a query posted to the TESL-L discussion group, a listserv serving ESL/EFL educators with a readership of more than 26,000 subscribers in 147 countries (L-SOFT list server at The City University of NY, 1999), was,

I'm afraid I can't, but isn't this amazing? There are so many projects, so many people using the Internet in their EFL/ESL classes, and so far no-one (apparently) has done much work on evaluating its value. An idea whose time actually came a while ago (Sheffner, 1999).

There are several studies, however, which have investigated e-mail exchanges and/or discussion groups in particular that have yielded some interesting results. In a two-year study involving 124 intermediate Spanish language students at a small public university in the Northeast, Lee (1997) used e-mail to allow students to exchange ideas, express opinions, and discuss selected topics of Hispanic culture with their peers, the instructor, and native speakers.

The students were also encouraged to post and answer questions to a class electronic discussion group. The students were assigned in small groups to a native speaker, and communicated via e-mail at least once per week regarding questions ranging from grammar to cultural issues. They were also encouraged to search the Internet for resources on a topic of their choice for a cultural project to be turned in at the end of the semester. To assess the efficacy of using the Internet, the students were given follow-up surveys using a five-point Likert scale to determine their perceptions regarding the value of the Internet to their language and culture acquisition. Virtually all of the students (92.7%) agreed that e-mail helped them improve their writing skills, and more than eighty percent agreed that they gained practical knowledge of Spanish through the Internet projects and would continue to use the Internet in the future. The majority of students also indicated the side benefit of gaining technological skills through this exposure to using the computer (Lee, 1997).

Bailey and Cotler (1994) underscored this side benefit of using the Internet for foreign language instruction by asserting that the technological skills acquired through in-depth experience using the computers are useful not only for language acquisition, but also are beneficial for better quality of life, as well as career development (Bailey & Cotlar, 1994). Indeed, considering the highly technological nature of today's Air Force, any means or activities that promote the advancement or acquisition of technical skills are beneficial to the Air Force overall.

In another two-year study using a variety of Internet resources, including e-mail, listservs, and IRC, Oliva (1995) found that “virtual immersion” in Italian language and culture helped students improve their skills in a manner similar to in-country immersion training, but with more emphasis on written skills and less on speaking. The extensive use of real communication for a real purpose in accordance with a content-based instructional style allowed the students to use the target language as a communicative tool to focus on getting the point across rather than simply an exercise in grammar or the structure of the language itself.

A descriptive self-report written by Kroonenberg (1994), an English and French secondary-school teacher, asserts how using e-mail and chat rooms helped students develop communicative skills and thinking in the target language, as they were required to negotiate real conversations about relevant topics, while Baugh and Baugh (1997) note that inter-cultural e-mail exchanges gave their students an authentic reason to learn Spanish.

Another major benefit of using e-mail exchanges and discussion groups is that the sense of anonymity lessens the effect of performance anxiety, lowering the affective filter and allowing students to more freely and fluently express themselves (Chun, 1994; Kroonenberg, 1994; Warschauer, 1995a). Other major benefits of using the Internet for cultural exchanges include the fact that delivery is much faster than regular mail, e-mail is cheap and efficient, and the ease of storage and analysis of all kinds of written communication is unparalleled by traditional mediums (Lunde, 1990). After performing two small pilot studies in

which her ESL students communicated via e-mail to international "keypals" (electronic penpals), Mello, (1998) wrote,

In my opinion, a penpal project is beneficial to the student because they can practice reading and writing, and use English (or other second language) not to communicate with the teacher in a contrived environment, but as an authentic medium for expressing their ideas, thoughts, and beliefs to a real audience.

Bialystok (1981), in her investigations of the strategies successful language learners use, performed stepwise regressions on the effects of strategy use on the four skills and found that functional practice, which includes any attempt by the learner to increase his or her opportunity to use language for communicative purposes, consistently accounted for significant portions of the variance. That is to say, the learner strategy shown to be most related to achievement in French acquisition was functional practicing, regardless of the task or purpose. What better way to ensure learners have the opportunity to pursue communicative goals than to enable them to meet new native speaking friends or language learning peers on-line in a friendly, non-threatening environment such as through e-mail, chat rooms, MOOs, or the myriad of other resources available at a mouse click on the Internet?

Beauvois agrees (1992). Her research using real-time synchronous discussion groups with both elementary and intermediate language level learners has shown that students who are typically inhibited during oral classroom discussions tend to participate more freely during the type-written discussions. The computer serves as a great equalizer, virtually eliminating the boundaries of

accent, gender, race, etc., leaving the students more relaxed and willing to offer their thoughts and opinions fully about any topic that interests them (Bailey & Cotlar, 1994).

What is more, a number of studies have shown that such written communications tend to be longer and more lexically and syntactically complex than equivalent face-to-face discussions between the same groups of students (Fox, 1998; Kern, 1995; Warschauer, 1995a; Warschauer, 1995b). Along the same lines, a quantitative study comparing the compositions of seventh grade students writing for a distant peer audience via e-mail to those written for the teacher alone found that the students' compositions were much better when contextualized and addressed to the authentic peer audience (Cohen & Riel, 1989).

Additionally, Chun (1994), after a two semester quantitative study of beginners in German, argues that the written communication via networked discussion groups so closely mirrors the American Council on the Teaching of Foreign Language's proficiency goals for spoken competence, that these conversational skills acquired through networked written discourse should not only strengthen reading and writing skills, but also gradually be automated and transferred to spoken competence as well.

However, one potentially negative factor associated with communicative language learning practices in general, but especially e-mail, discussion groups, and chat rooms, is that learners tend to place less emphasis on grammatical accuracy in favor of conveying meaning in the most expedient way possible using

the language they have already automatized. For example, if Student A uses the imperative form of a verb when he should use first person, but Student B correctly understands the message regardless of the grammar error, then why should Student A waste energy learning to conjugate correctly? While favoring content over grammar is not necessarily all bad, this lack of regard for linguistic issues when taken to extremes can be problematic (Kern, 1995; Paramskas, 1993).

Following his studies of students using networked discussion groups, Kern (1995) summarized the benefits of this type of discourse as follows:

- a) students had more frequent opportunity to express themselves than in oral discourse;
- b) they produced more language (two to four times more sentences);
- c) they had more time to develop comments;
- d) a collaborative spirit developed among network users;
- e) the students experienced enhanced motivation, with shy students participating more fully;
- f) the students experienced less performance anxiety;
- g) the network had a positive effect on writing, reading, and possibly speaking.

The only real negative effects noted by Kern were the aforementioned tendency for inattention to grammatical accuracy, a lack of conversational coherence, and difficulties in reaching group consensus. However, Kern believes the benefits far outweigh the challenges. The consensus in the literature would seem to agree with these conclusions (Beauvois, 1992; Chun, 1994; Colomb &

Simutis, 1996; Korenman & Wyatt, 1996; Kroonenberg, 1994; Ma, 1996; Paramskas, 1993; Rankin, 1997; Salaberry, 1996; Warschauer, 1995a).

Regarding usage of the World Wide Web, a study performed by Jacobson and Spiro (1995) showed that a group of students given a complex learning task, such as language learning, in a hypertext environment performed significantly better on a transfer of knowledge task than the control group, to whom the same material was presented in a linear format. The control, as expected, did perform better on rote recall tasks, but they were unable to transfer the knowledge they had memorized to new situations, while the hypertext group could and did. Although the researchers used a CD-ROM hypertext environment as opposed to the World Wide Web, the same principles should hold true for the Web provided similar explicit guidance to help students navigate through the learning task is provided by the Web site.

Another extremely useful resource, especially for the acquisition of listening skills and cultural expertise, which has not yet been mentioned, is the ease of receiving both SCOLA and international radio broadcasts from distant countries in the native languages. SCOLA is a non-profit educational consortium that receives and re-transmits television programming from more than fifty different countries in their original languages. SCOLA transmits these international television programs for educational use via satellite and the Internet to an audience of more than 10 million viewers in North America alone (SCOLA, 1999). These types of media make possible access to absolutely current political and social issues in real-time, visually and/or aurally, allowing language to

become the gateway to the lives of different cultures, not just grammar drills (Armstrong & Yetter-Vassot, 1994).

To summarize the principle benefits of using the Internet for foreign language learning, Warschauer delineates five specific features that distinguish computer-mediated communications (CMC) from other communications media: a) text-based and computer-mediated interaction, b) many-to-many communication, c) time- and place-independence, d) long distance exchanges, and e) hypermedia links.

Through the Internet, language learners have a unique opportunity to search out and use a variety of authentic foreign language resources, such as radio and television shows, libraries and museums, newspapers, city and tourist guides, and on and on, *ad infinitum*. Clearly, the foreign language learner wishing to study a language independently can find an enormous amount of up-to-date learning materials in virtually any target language. These benefits, in addition to the ability to seek out and freely communicate with foreign language learning peers and native speakers, make the Internet a resource of inestimable value to the foreign language learner – provided, of course, that s/he knows how to make the most of such a vast treasure house of cultural and linguistic resources!

Chapter 5: Russian University – an Interactive World Wide Web Site

The preceding chapters of this thesis presented and discussed the long-range goal of the U.S. Air Force to foster a large body of officers who are proficient in foreign languages and cultures. Then, the literature in the field of foreign language education was examined in an effort to determine what is meant by “proficiency” and how language competence is measured, both by foreign language educators, as well as by the Air Force.

As discussed in chapter two, the current Air Force definition of proficiency for the purposes of the Foreign Area Officer program is a score of “2/2” (reading/listening) achieved annually on the Defense Language Proficiency Test. After discussing in detail what is required to attain this test score, this paper investigated whether or not the Air Force provides adequate linguistic and cultural support materials and training for its officers to achieve and maintain this standard. Chapter three explored the programs currently available to linguists and argued that the Air Force does not provide adequate support. Building off of the conclusion that better training and support is needed, chapter four returned to the literature of the field and submitted evidence that the Internet may be used with success for foreign language instruction.

Proceeding on the assumption that the Internet is a viable resource for the instruction of foreign languages, this chapter presents the author’s proposal for an interactive World Wide Web site to be used by Air Force officers in the pursuit of

achieving and maintaining the standard of proficiency laid out by the FAO program. For the sake of brevity, the model is presented with the Russian language as the focus; however, most features introduced should be readily adaptable for use in Web sites geared toward other foreign languages. These sites would be grouped together under a single, general language learning Web site with hypertext links to each language offered. The Russian model that follows represents one such link. It should also be noted that the author's primary concern in presenting this model is instructional content, not Web design. Therefore, material is presented in a "bare-bones" format without graphics or other enhancements that would be integral features of the actual Web site.

This chapter discusses the general layout and features of the proposed "United States Air Force's Russian University" Web site. To facilitate the presentation of this model, the author offers a "guided tour" of the Web site as viewed through the eyes of "Sasha, the Russian Language Learner." The fictional Sasha begins by viewing the Home Page (illustrated by Figure 4), and then Sasha selects each hypertext link and explores samples of the resources offered through that link. For the purposes of this discussion, Sasha is assumed to hold the rank of Captain. Sasha originally learned Russian several years earlier while at university and has continued to maintain his language using Russian FLAMRIC and personal materials sporadically over the years. Sasha's most current DLPT score was a 1+/1+ (reading/listening) and he is committed to improving that score to a 2/2 and beyond. From this point forward, Sasha's actions are denoted by *italicized print*.

Sasha visits the Russian University Home Page. (See Figure 4). Since Sasha is a first time visitor to this site, he mouse clicks on the topmost hypertext link and views the next page (see Figure 5).

Figure 4: Russian University Home Page

**THE UNITED STATES AIR FORCE'S
RUSSIAN UNIVERSITY**

First Time Visitors – Please [click here](#) for an overview of the resources and activities available at the United States Air Force's Russian University Home Page!

[Cyrillicize your computer](#)

[Video / Audio Clip of the Week](#)

[Article of the Week](#)

[Grammar Topic of the Week](#)

[Link to Chat Room / Bulletin Board \(BBS\)](#)

[Collaborative Projects](#)

[Peer Newspaper](#)

[Links to Russian Resources on the Net](#)

[Grammar and Vocabulary Games](#)

[Request a KeyPal or join Discussion List \(US military users register here\)](#)

[Assessing Your Progress: Mock DLPTs](#)

[Suggestion Box](#)

[Upcoming Events](#)

(Note to reader: boxed text indicates a hypertext link.)

Figure 5: First Time Visitors

Добро Пожаловать! Welcome to Russian University

The United States Air Force has established the Russian University Web site in an effort to better support the needs of its Russian linguists with language maintenance resources and training. Although the [keypal and discussion list](#) links are restricted by password to U.S. military users, all of the other resources found here are open to everyone.

Through the hypertext links listed on the Home Page, you may view weekly presentations of [video and audio](#) clips, [articles](#), and [grammar](#) topics. If your computer currently does not support Cyrillic text, you may download the necessary fonts and keyboard layouts through the [Cyrillicize](#) link. The Cyrillic font KO18 is used exclusively in the [chat room](#) and on the [Bulletin Board](#) (BBS), where you are encouraged to discuss the current or past video, article, and grammar topics, or any other topic that strikes your fancy – provided you maintain proper decorum and use Russian exclusively.

Through the [collaborative projects](#) link, you may contribute something back to this site, while learning, by working in Russian on group projects for the benefit of Russian University. Through the [peer newspaper](#) link, you may publish your original Russian articles or offer your assistance to others by peer editing their articles.

The Virtual Town of [Little Russia](#) is an interactive “MOO,” where you can meet friends, explore and manipulate your virtual reality environment, play games, attend conferences, and many other activities. Join the collaborative project in designing this town or visit this page to find out what a “MOO” is and for further details. (*this page under construction*)

Finally, planned projects, appearances in the chat room by Guest Lecturers, and scheduled events of interest are highlighted on the [upcoming events](#) link.

We hope you enjoy your visit. Please feel free to contact us with any comments or concerns through the [suggestion box](#).

[Return to Home Page](#)

Sasha returns to the home page through the bottommost link in Figure 5, then selects the Cyrillicize Your Computer link.

“CYRILLICIZE” YOUR COMPUTER

A critical factor to the success of this site is the availability of Cyrillic fonts and keyboard layouts, as well as having a standard encoding format for all activities on the site. Since computers in the United States do not typically come packaged with this software, it is necessary to include information on the Web site on how to obtain and install the required fonts and keyboard layouts. In a study of the efficacy of conducting formal language training via the Internet currently being conducted at the U.S. Air Force Academy, the required software was copied onto CD-ROMs and mailed to the study participants (Supinski, 1999). However, these fonts and layouts may easily be downloaded via ftp from an Internet site.

Additionally, there would be little point to attempting to hold a discussion in the chat room when some of the participants’ computers use KO18 for encoding while others are using any of a number of other “standard” Cyrillic formats currently available to all users, such as MacCyrillic, Windows 1251, or ISO 8859-5. Unless the participants are using a standard encoding format, they will be unable to read each other’s responses. To help minimize this difficulty, the Home Page, as well as the hypertext links should all carry the statement in the English text portion that KO18 is the encoding version used for all Cyrillic associated with this site.

Sasha follows the directions to download and install the appropriate fonts and keyboard layouts, then returns to the Home Page and mouse clicks Video / Audio Clip of the Week.

VIDEO / AUDIO CLIP OF THE WEEK

When Sasha arrives at the Video / Audio Clip of the week page from week to week, he encounters a variety of styles of video or audio. The material ranges from a short news broadcast, to a video recorded conversation taking place on the streets of Moscow, to a music video performed by a currently popular Russian rock group. Complete transcripts are made available via hypertext. Each clip of the week includes pre-viewing and trans-viewing exercises, in addition to any relevant cultural notes. More advanced learners are encouraged to attempt a translation of the English text (viewable via a hypertext link) before viewing or to attempt a transcription in Russian while viewing. For post-viewing, the "how to use this page" section encourages the learner to add his or her questions or comments regarding the clip to the bulletin board, discuss the materials via the chat room, or e-mail his or her keypal to ask for a second opinion. This page also provides hypertext links to the SCOLA home page and the Voice of Russia radio broadcasts for further listening practice. Students are encouraged to discuss their summaries, comments, and questions about these broadcasts in the chat room, bulletin board, or via e-mail.

When Sasha views the video clip page for this week, he finds a music video entitled "Storm Clouds" by the popular group "Ivanushki International."

Figure 6: Video Clip of the Week

<<Тучи>>

Перед Просмотром: (Before you watch)

(Intermediate and Advanced learners, translate the following text. All others, fill in the blanks in the following exercise).

You're already familiar with the group «Ivanushki» who sing the song «The Dolls». This video shows the group at the very beginning, when it all began in 1996. Their first song, «Storm Clouds,» quickly became #1 in Moscow and was the most popular song in Russia in 1997.

Вы уже _____ с группой «Иванушки» _____ поёт песню «Куклы». Этот видео показывает группу в _____ начале, когда всё _____ в 1996. Их первая _____ «Тучи» быстро стала номер 1 в Москве и была _____ популярной _____ в России в 1997-____ год. Click here for [answers](#).

Культурные заметки: (Cultural notes) click here for notes [по-русски \(in Russian\)](#)

«Иванушки International» was instrumental in moving Russian popular music into the video mode similar to MTV in the West. Before videos such as «Тучи» in 1996, Russian music video television programs such as «Музикальное обозрение» (Musical Reviews) mostly played US and European music videos. Now many other groups produce concept videos to promote their music on

Russian television and in clubs and dance halls. Since 1995, club music – much in the style of European dance music – has been one of the staple outlets for youth culture expression in Russian cities. Styles such as «хайус» (house), «джангл» (jungle), «техно» (techno), and «хип-хоп» (hip-hop) have been heard in Moscow clubs such as Титаник, Метро, Птич, Хамелеон, and Клуб Достоевский.

Посмотрите на карту внизу и обратите внимание на прогноз погоды в России.
(Look at the map below and pay attention to the weather in Russia).

*** a graphic of a map of Russia showing temperature ranges and weather patterns (like those typically seen on television news broadcasts) would be inserted here***

- а) Какая сегодня погода в вашем городе? (What's the weather like in your city today?)
- б) Какую погоду вы любите? (What kind of weather do you like?)
- в) Какая погода будет в Москве? (What will the weather be in Moscow?)
- г) Что ожидается в Омске? (What weather is expected in Omsk?)
- д) Сколько градусов будет ночью в Петербурге? (What will the night-time temperature in St. Petersburg be?)

Click here for [answers](#).

Во Время Просмотра: (While you watch)

a) Какие виды погоды вы видите в этом клипе? (What types of weather do you see in this clip?)

___ Дождь (rain) ___ Солнце (sun) ___ Тучи (storm clouds)

___ Гром (thunder) ___ Молния (lightning) ___ Снег (snow)

6) Заполните пропущенные слова. (Fill in the missing words)

«Тучи» Иванушки

Ты ругаешь дождь (You curse the rain)

В луже _____ асфалте. (in the puddle on the asphalt.)

Ты _____ и ждёшь (You stand and wait)

И намокла платье (and you've soaked your dress.)

Etc.

[return to Home Page](#)

© T. J. Garza (1998)

Having completed the pre-viewing exercises, read the cultural notes in Russian, and attempted a translation of the English transcription, Sasha watches the video. While watching, he jots down a note that the setting where the video was filmed in some ways resembles a space ship. He decides to add a comment about this to the bulletin board and to ask in the chat room if anyone else noticed the resemblance. The next day, Sasha reads the article of the week.

ARTICLE OF THE WEEK

Like the weekly video clips, the articles on this page vary in topic from week to week. Different articles may be chosen for different proficiency levels;

however, the same article may be used if the series of post-reading questions is broken down to require the students to perform tasks commiserate with their level of proficiency. The questions at the end of the sample article demonstrate how to vary the task requirement.

Often the articles will be current newspaper articles, sometimes cultural commentary or editorials, sometimes of special military interest, but this week the article is humorous. Once again the student is encouraged in the “how to use this page” notes to complete the pre-reading exercise and to use the discussion group, chat room, and keypals to consult with other learners or native speakers who have also read the article regarding their interpretations.

Figure 7: Article of the Week

Pre-reading contextualization:

This short article is a humorous story about a conversation that takes place between a man and his wife. Before reading the article, consider how well two people who have long been married know each other, and the types of activities a man might not want his wife to find out about.

«Где ты был?»

-- Сейчас будем ужинать -- сказала жена Степанову.

-- А что у нас на ужин? -- поинтересовался он.

-- Тебя что, вчера не было? -- каким-то подозрительным голосом произнесла жена.

«Черт! Дернуло же меня спросить, что на ужин! -- подумал Степанов.

– Теперь придется выкручиваться, придумывать, где я был вчера и в это время.» «А что? Спокойнее, спокойнее... -- начал успокаивать он сам себя. – Надо проанализировать вопрос: где я был. А может, меня не было там, где она предполагает. Или я там был, но не в это время, а в другое. И не с тем, с кем она думает, а с другим. И выпили мы по чуть-чуть, а не напились, бог знает как! И вообще: я что, не могу быть там, где захочу, в какое угодное время и выпить с кем хочу и сколько?»

-- Московское время двадцать один час! -- сказал диктор по радио. И вчера он так же говорил, и позавчера. И тут Степанова осенило:

-- Я же в это время всегда дома бываю! И вчера был! -- сказал он жене.

-- А чего тогда спрашиваешь? -- спросила жена.

-- Просто так, -- виновато ответил Степанов.

-- Владимир Андреев (Петербург)

([click here](#) for translation)

([click here](#) for questions)

Перевод: (translation)

«We're going to eat dinner in just a minute.» Stepanov's wife told him.

«What are we having?» he replied with interest.

«What's with you, where were you yesterday?» in a somewhat suspicious voice pronounced his wife.

«Damn! What ever possessed me to ask what's for dinner!» thought Stepanov. «Now I'm going to have to wiggle out of it by making up where I was at this time yesterday.» «OK, calmer, calmer...» he began to calm himself down. «I have to analyze through this question of where I was. Maybe I wasn't where she thinks I was. Or I was there, but not at that time, but another. And not with who she thinks, but with someone else. And we drank a little, but didn't get drunk, God knows how! And in general: can't I be wherever I want, at whatever time suits me, and drink with whoever I want and as much as I want?»

«Moscow time is 2100 hours.» said the radio announcer. And yesterday he said the same thing, and the day before. And then it struck Stepanov:

«I'm always home at this time! And I was yesterday!» he said to his wife.

«Then why do you ask?» asked his wife.

«Just because» guiltily answered Stepanov.

-Vladimir Andreev (Petersburg)

(translation by Susan M. Valentine, 1999)

Вопросы (sample questions)

Level 1: What did Stepanov want to know from his wife.

Level 2: What activities does Stepanov do that he might not want his wife to find out about?

Level 3: How did Stepanov react when the radio announcer gave the time? [Click here for answers.](#) [Return to Home Page](#)

Sasha completes the reading, and then consults with his keypal to discuss what Stepanov had for dinner that night and how some things are the same whether in Russia or the United States. The next day, Sasha decides to complete the grammar lesson of the week.

GRAMMAR TOPIC OF THE WEEK

This page, like the two preceding pages, presents new information on a weekly basis, while each preceding week's lessons are stored in an archive, ready to be retrieved by new visitors to the Web site or reviewed by those who have been using the Web site for a while. On any given week, the grammar topic page presents one feature of Russian grammar that typically causes difficulties for non-native speakers, such as a review of time expressions or aspect usage. The review is presented with a brief textual explanation, followed by a short story or poem that demonstrates the grammatical feature in context. Then the learner has the opportunity to complete exercises using the feature under discussion, and has the opportunity to receive immediate feedback on his or her answers.

The users are also encouraged to submit to the suggestion box those topics that they find particularly challenging. Future grammar lessons will attempt to address these topics. For more immediate feedback, the student can request help from the discussion group or his keypals, check the archives for related topics, use the hypertext links on this page to reference on-line dictionaries and grammar guides, or use the on-line FLAMRIC exercises for more practice.

Having completed the week's grammar exercises about the use of Russian aspect, Sasha decides to try out his new skills in real-world conversation about the Ivanushki video he viewed earlier this week.

CHAT ROOM AND THE ELECTRONIC BULLETIN BOARD

As mentioned in earlier pages, the chat room is where the learner can go to discuss synchronously in Russian any topic of interest with any other user on-line at the same time. Each of the preceding pages encourages the learners to use the articles, video clips, and grammar lessons as primary topics of discussion in the chat room. However, this room may also be used to facilitate collaborative projects, to discuss cultural issues, or simply to socialize in real-time.

The bulletin board facilitates the accomplishment of similar tasks, except asynchronously. Students can post a message on a topic of interest, then come back later to read any responses to his message posted by other users. In this manner the thread continues the asynchronous conversation, while the learners may either "lurk" (read, but not contribute) or respond, if they have something to contribute.

Sasha has been working with other learners and native speakers via the chat room, discussion group, and bulletin board at the Russian University Web site, as well as with his keypals, for a few weeks and his confidence in his ability to communicate textually in Russian is growing. He decides it is time to become more involved and contribute something back to the site, as well as to publish some of his original work.

COLLABORATIVE PROJECTS

The collaborative projects page allows learners to make the most of the benefits of Vygotskyan-style collaborative learning by providing direction for real-world tasks the learners may perform using Russian exclusively to facilitate the performance of the task. A number of studies have noted the danger of the learner becoming overwhelmed by the Internet and all it entails unless s/he is provided with a specific goal or task on which to concentrate his or her efforts (Frizzler, 1995; Riel & Levin, 1990; Warschauer, 1997; Zhao, 1996). Collaborative learning projects provide that goal.

On this page, the learner finds a variety of options in which to participate. For large scale projects, such as the design of a new building for the forthcoming MOO or the editing of the peer newspaper, the Web site facilitator schedules a time to meet in the chat room or starts a stream of discussion on the bulletin board in order to get the task underway. Anyone may participate and all are encouraged to contribute their ideas. Students are also able to choose from a list of smaller scale projects, such as designing a new crossword puzzle or transcribing a clip for

a future video lesson. The student may either then complete the project on his or her own or, preferably, solicit help from chat room users, the discussion list, or his or her keypals. Upon completion of the project, the learners can submit their work to the Web site administrator for publication and receive credit for the work through his or her pseudonym(s), thus adding additional motivation for completing future projects because the learners have the opportunity to see their work published on the site and used by other learners.

As learners become more familiar with the needs of the Web site and with collaborative learning among peers, many of the tasks, such as lesson plan selection and writing, can be shifted to the learners with the Web site administrator taking on more of a management role and the learners contributing even more directly to their own education, thus ensuring the needs and topics of interest of the learners are addressed.

PEER NEWSPAPER

Similarly to the collaborative learning page, the peer newspaper provides students with an opportunity to see their original work published to a large audience. Writers at any level may submit their original Russian articles, comics, etc. to the Web site manager for inclusion in the next issue of the newspaper. Advanced learners may apply to become peer editors. These editors are periodically sent articles written by less experienced learners to edit and return to the Web site manager. The editors are asked to bear in mind that text at all proficiency levels is acceptable, and not to alter the author's original text except

for grammar and other readability problems. Then the edited text is e-mailed back to the original writer for approval of changes before publication. Writers are also encouraged to request help from keypals or other resources provided by this Web site before submitting the article for the editing process. A suggested topic list, including ideas for articles about cultural or linguistic issues (i.e., Russian holidays, food, or the use of the pronoun «Мы»), is provided on the Web page, but learners are encouraged to write about any topic that interests them. The learners are then encouraged to explore the hypertext links provided on the next page in search of resources for cultural or linguistic articles.

Past issues of the newspaper are archived, providing a record of progress for those who contribute regularly, as well as an ever-growing reference list of articles about a variety of topics.

Having chosen to write an article for the newspaper about the Russian celebration of Пасха (Passover or Easter), Sasha visits the next page in search of references that will provide the information he needs to complete his project. He also posts a note on the bulletin board asking if anyone else is interested in Russian holidays, and if so, what useful references they have found either on the Internet or in print.

LINKS TO RUSSIAN RESOURCES ON THE INTERNET

This page is a clearinghouse of hypertext links to all kinds of resources available on the Internet. Through hypertext links on this page, the learner is able to directly access all types of Russian resources available on the Internet. S/he is

able to locate additional grammar help, play Russian language word games, visit the near real-time camera on a St. Petersburg street, access Russian television via SCOLA, visit Russian book stores, access current rock music videos, and a plethora of other resources and activities. For a sample listing of hypertext links that might be included on this page, see Appendix B.

Sasha has been working hard all week and would like to spend a little time on his Russian studies tonight. However, he would also like to relax, so he decides to spend his time chatting with peers in the chat room and playing Russian language games via the game room page.

GRAMMAR AND VOCABULARY GAMES

On this page, the learner finds a myriad of activities intended to make vocabulary and grammar acquisition fun and stress-free. Games found here include Russian hangman, scrabble, crossword puzzles, and pictionary-type games (where the student sees a picture and must select the correct words to describe it, or where a character is provided and performs actions based on the student's word selection). Initially, all these games can be provided through links to other Internet sites already set up to provide them (see Appendix B). However, as students send in finished projects suggested by the collaborative learning page, the variety of games native to this site will grow.

Sasha would like to design a crossword puzzle for the game room; however, he would like some help coming up with challenging vocabulary and

clues. To find the help he needs, he registers with the site, receives his password, and requests to be added to the keypal list.

KEYPALS AND THE DISCUSSION LIST

Since the World Wide Web is available to virtually anyone, virtually anywhere, it is very difficult to imagine who one may meet via e-mail, chat rooms, etc. This anonymity poses particular problems for the military, as operations and computer security become major issues. In order to help combat this problem, only military members are allowed to register. In order to use the two facets of this Web site that involve the release of e-mail addresses (keypals and the discussion group), the military member must register and receive a password from the Web master. As security measures, the following procedures are implemented: 1) the member is required to input the final four digits of his social security number, which may be verified against his name and duty location, or 2) the password may only be sent to a valid military e-mail address (i.e., an address ending in "af.mil").

Once the member is registered, he may release his e-mail address in discussion group postings with confidence that he is only releasing it to other U.S. military personnel. In addition, he is free to establish closer personal relationships with his keypals, since he is confident they are actual U.S. military members, and not hostile parties.

In order to receive keypals initially, once registered, the user should send a request to the Web master, including his or her language proficiency level. The

Web master then attempts to provide approximately five keypal addressees – three at or near the user's level, at least one above, and at least one below. This mix of proficiency levels should help facilitate student-to-student collaboration, as the less experienced learners request help and the more experienced act as informal guides and tutors.

After having consulted with his keypal circle a couple of times, Sasha has refined an idea for a building that could be included in the MOO currently being constructed at the Russian University. He and his new friends want to include a "history museum" in the town of Little Russia, but do not know how to design it. Sasha decides to submit the idea to the suggestion box so that others more technically knowledgeable can design the virtual building and, later, he and his keypal circle can join in with ideas for exhibits.

SUGGESTION BOX

After having visited the various links associated with Russian University, many users will undoubtedly have suggestions and ideas for improving the site. The suggestion box provides an easily accessible, highly visible means of access to the Web site designers and maintainers. The active participation of the users and the commitment of the designers to listen to their suggestions can only improve the site for everyone.

In addition to the suggestion box, this page holds a list of FAQs (Frequently Asked Questions) and the answers to these questions. When technical problems arise, they can be answered here for everyone to reference as

the need arises. The FAQs address any questions that the Web master deems frequent enough to be posted for the entire population of Russian University to read.

An additional hypertext link is provided to advertise Upcoming Events. As the population using the Web site grows, the Web master may invite guest lecturers to "speak" on the chat room, or in the Little Russia conference room when the construction of the MOO is completed. In addition, advertisements for upcoming projects or pertinent military information (such as the convening dates for the next FAO board or DLPT information) may be listed here.

Sasha has spent a few months practicing his Russian using the Web site and, with his annual DLPT coming up soon, he would like to assess his skill level according to the ILR scale. Sasha clicks on the final link and uses the mock DLPTs to determine where he stands.

ASSESSING YOUR PROGRESS: MOCK DLPTs

At any time, a language learner may come to this page to gain a better understanding of what skills are required to attain each skill level in both reading and listening comprehension. This page offers banks of DLPT-style multiple choice questions arranged in categories according to skill level tested. The learner may answer one or several of the questions, then access the answers, including detailed explanations of why each choice is correct or incorrect, via hypertext. In this manner, the learner may easily determine whether or not s/he can comprehend the language at his or her desired skill level.

This page also offers a complete sixty-five question Mock DLPT in both listening and reading comprehension, giving the learner the opportunity to practice on a full length “trial-run” test simulation.

Having invested a little time each week on maintaining and improving his control of Russian by practicing his listening, reading, and writing skills using the tools provided by the Russian University Web site, Sasha schedules his appointment for this year’s Defense Language Proficiency Test. After practicing both alone and in the “virtual” company of language learning peers and native speakers, and then assessing his progress in Russian using Mock DLPTs, Sasha feels confident he will be able to perform well on the DLPT and reach or exceed the 2/2 rating he set for himself as a proficiency goal.

Chapter 6: Conclusion

The previous chapter presented the author's version of a proposed World Wide Web site to aid Air Force linguists in reaching the level of proficiency proscribed by the newly adopted Foreign Area Officer program, helping the Air Force meet its long-range goal of having ten percent of its officers proficient in a foreign language by the year 2005. In reviewing the literature of the field of foreign language education, this paper argued that the Internet is indeed a viable resource for foreign language instruction. The model Web page presented in the previous chapter is simply one possible way of making these resources readily available for use by Air Force language learners. The point is not necessarily the adoption of the complete model: the main point is that the Internet can and should be used to help place authentic, current foreign language resources directly into the hands of the language learner.

DIRECTIONS FOR FURTHER RESEARCH

As stated in chapter four of this thesis, because Internet technology is so new, very little research has been completed and published regarding the efficacy of the various aspects of the Internet for foreign language instruction. Clearly, the Internet is here to stay and much more qualitative and quantitative research is needed in order to gain a better understanding of how instruction via chat rooms, e-mail, and other cooperative learning tasks affect language learners, as well as their instructors.

Furthermore, an area of study that is conspicuously absent from the literature is the efficacy of using the Internet for *independent* language study. As computer experience and equipment become more readily available to private individuals in their homes and offices, the question of whether or not learners can effectively learn and/or acquire foreign language skills via the Internet will become increasingly important. For the Air Force, the ability of individual learners to achieve proficiency independently is critical to the achievement of its long-range goals due to factors such as budgeting constraints and remote duty locations.

With regard to the model presented in this thesis, the town of Little Russia interactive MOO was discussed only as a page "under construction" largely due to the difficulties of demonstrating this technology in a printed, linear format. However, if the idea of a foreign language Web site is adopted, the feasibility of including a MOO or MUD should definitely be considered. This medium, although initially a little more difficult to implement and to learn how to operate, offers benefits no other facet of the Internet can duplicate, such as the ability to textually construct an environment that others can then explore and the ability to interact with both other users and textually described objects.

Next, an examination of the costs, resources, and personnel involved in designing and maintaining such a Web site was beyond the scope of this paper, although these are issues which clearly must be addressed. Also, for the sake of brevity and clarity, this paper discussed only the needs of Air Force linguists who are officers striving to meet the FAO language proficiency requirements;

however, the same Web site model and language learning strategies recommended for officers should prove equally effective in meeting the needs of linguists at any rank, including enlisted personnel and Department of Defense civilian personnel.

Additionally, after the implementation of a language resource Web site, a method of measuring the effectiveness of the site must be addressed. Due to the diverse locations of users, this task may prove most difficult. However, there are a few ways already built into the system that may help provide some answers to this question. First, the Web site itself includes a suggestion box where learners can provide their comments. It would be very easy to add a survey to the site, asking learners to self-report what they believe is either working or not working for them. Although there would be no way of accurately gauging the demographics of who returned the survey, the data should at least prove useful for improving the site.

Second, in order to receive Foreign Language Proficiency Pay (FLPP), Air Force linguists are already required to take the DLPT annually. A sample of this population of linguists could be selected and asked to participate in a study of the efficacy of the Web site. The participants in this study would be asked to record their use of the Internet for language learning in a journal, while their proficiency levels would be measured using the DLPT.

Finally, given the advantages of authentic language listening and reading materials and the possibilities for collaborative language learning available via the Internet, the implementation of a Web site or other means of making these

resources readily available to U.S. Air Force linguists is clearly a necessary next step toward the attainment of the Air Force's long-range goals.

Appendix A

Below are the Air Force's descriptions for reading and listening proficiency as measured by the Defense Language Proficiency Test (DLPT). These descriptions have been adapted from Air Force Instruction 36-2605 and the Air Force Foreign Area Officer Home Page (1999).

READING COMPREHENSION

Level 0 (None)

No practical understanding of the written language. Understanding is limited to occasional isolated words with essentially no ability to comprehend texts.

Level 0+ (Memorized)

Can recognize all the letters in the printed version of an alphabetic system and high frequency elements of a syllable or character system. Able to read some or all of the following: numbers, isolated words and phrases, personal and place names, street signs, office and shop designations. Examples of types of reading passages: weather maps, schedules, programs, menus, numbers, any text in which meaning is conveyed only via lexicon.

Level 1 (Elementary)

Can comprehend very simple connected written material in a form equivalent to usual printing or typescript. Examples of types of reading passages: newspaper announcements, sale ads, bulletin board information, invitations, tourist information.

Level 1+ (Elementary)

Sufficient comprehension to understand simple discourse in printed form for informative social purposes. Can guess at unfamiliar vocabulary if highly contextualized, but with difficulty in unfamiliar contexts. Examples of text types: see level 1 and level 2.

Level 2 (Limited Working)

Sufficient comprehension to read simple authentic written material in a form equivalent to usual printing or typescript on subjects within a familiar context. Examples of text types: factual descriptions, narrative reporting where the author is invisible or neutral, general schema, instructions, directions, materials addressed to less experienced native speakers.

Level 2+ (Limited Working)

Sufficient comprehension to understand most factual material in non-technical prose as well as some discussions on concrete topics related to special professional interests. Examples of text types: see level 2 and level 3.

Level 3 (General Professional)

Able to read a variety of authentic prose material on unfamiliar subjects within a normal range of speed and with almost complete comprehension.

LISTENING COMPREHENSION

Level 0 (None)

No practical understanding of the spoken language. Understanding is limited to occasional isolated words with essentially no ability to comprehend communication.

Level 0+ (Memorized)

Sufficient comprehension to understand a number of memorized utterances in areas of immediate needs. Slight increase in utterance length understood, but must make repeated requests for repetition and requires frequent long pauses between understood phrases. Understands with reasonable accuracy only when this involves short memorized utterances or formulae. Utterances understood are relatively short in length. Misunderstandings arise due to ignoring or inaccurately hearing sounds or word endings (both inflectional and non-inflectional). Distorting the original meaning, can understand only with difficulty even such people as teachers who are used to speaking with non-native speakers. Can understand best those statements where context strongly supports the utterance's meaning. Gets some main ideas.

Level 1 (Elementary)

Sufficient comprehension to understand utterances about basic survival needs and minimum courtesy and travel requirements. Can understand simple questions and answers in areas of immediate need or on very familiar topics. Understands simple statements and very simple face-to-face conversations in a standard dialect. These must often be delivered more clearly than normal at a rate slower than normal with frequent repetitions or paraphrase (that is, by a native used to dealing with foreigners). Once learned, these sentences can be varied for similar level vocabulary and grammar and still be understood. In the majority of utterances, misunderstandings arise due to overlooked or misunderstood syntax and other grammatical clues. Comprehension vocabulary inadequate to understand anything but the most elementary needs. Strong interference from the candidate's native language occurs. Little precision in the information understood owing to the tentative state of passive grammar and lack of vocabulary. Comprehension areas include basic needs such as: meals, lodging, transportation, time, and simple directions (including both route instructions and orders from customs officials, police officers, etc.). Understands main ideas.

Level 1+ (Elementary)

Sufficient comprehension to understand short conversations about all survival needs and limited social demands. Developing flexibility evident in understanding conversation in a range of circumstances beyond immediate survival needs. Shows spontaneity in understanding at speed, although consistency of understanding uneven. Limited vocabulary range necessitates repetition for understanding. Understands more common time forms and most question forms, some word order patterns, but miscommunication still occurs with more complex patterns. Cannot sustain understanding of coherent structures in longer utterances or in unfamiliar situations. Understanding of descriptions and the giving of precise information is limited. Aware of basic cohesive features, e.g., pronouns, verb inflections, but many are unreliably understood, especially if less immediate in reference. Understanding is largely limited to a series of short, discrete utterances. Still has to ask for utterances to be repeated. Some ability to understand facts.

Level 2 (Limited Working)

Sufficient comprehension to understand conversations on routine social demands and limited job requirements. Able to understand face-to-face speech in a standard dialect, delivered at a normal rate with some repetition and rewording, by a native speaker not used to dealing with foreigners, about everyday topics, common personal and family news, well-known current events, and routine office matters through descriptions and narration about current, past, and future events; can follow essential points of discussion or speech at an elementary level on topics in his/her special professional field. Only understands occasional words and phrases of statements made in unfavorable conditions, for example through loudspeakers outdoors. Understands factual content. Native language causes less interference in listening comprehension. Able to understand facts, i.e., the lines but not between or beyond the lines.

Level 2+ (Limited Working)

Sufficient comprehension to understand most routine social demands and most conversations on work requirements as well as some discussions on concrete topics related to particular interests and special fields of competence. Often shows remarkable ability and ease of understanding, but under tension or pressure may break down. Candidate may display weakness or deficiency due to inadequate vocabulary base or less than secure knowledge of grammar and syntax. Normally understands general vocabulary with some hesitant understanding of everyday vocabulary still evident. Can sometimes detect emotional overtones. Some ability to understand implications.

Level 3 (General Professional)

Able to understand the essentials of all speech in a standard dialect including technical discussions within a special field. Has effective understanding of face-to-face speech, with normal clarity and speed in a standard dialect, on general topics and areas of special interest; understands hypothesizing and supported opinions. Has a broad enough vocabulary that rarely has to ask for paraphrasing or explanation. Can follow accurately the essentials of conversations between educated native speakers, reasonably clear telephone calls, radio broadcasts, news stories similar to wire service reports, oral reports, some oral technical reports and public addresses on non-technical subjects; can understand without difficulty all forms of standard speech concerning special professional field. Does not understand native speakers if they speak very quickly or use some slang or dialect. Can often detect emotional overtones. Can understand implications.

Appendix B

Below is a sampling of ten Russian language World Wide Web sites as examples of some of the types of sites that would be included as hypertext links on the “Russian University” Web page. Several of these sites also include hypertext links to hundreds of other interesting Russian language sites. The choice of possible resources is virtually limitless!

<http://www.rusam.com/>

RusNet America. This site is an aid for native Russian speakers in the U.S. Here the user can find out “что делать если...” (what to do if...) you have an automobile accident in the U.S., you want to find about U.S. schools, and many other topics – all in Russian. This site also has links to Russian magazines and newspapers, as well as a list of Frequently Asked Questions (FAQs) in Russian.

<http://www.auburn.edu/~mitrege/RWT/welcome.html>

Auburn University’s Russian Web Tutor. This site contains grammar help, including tutorials and exercises for both the *Nachalo* and *Golosa* Russian textbooks.

<http://russia.uthscsa.edu/>

Little Russia in San Antonio, TX. This site is largely in English; however, it contains many interesting Russian cultural features, as well as links to Russian pages. Here the user may find Russian music in many genres, a Russian cookbook, Russian jokes, or downloadable Russian games and computer software resources.

<http://www.rbcvideo.com/>

RBC On-Line Catalog. Although the proposed “Russian University” Web site would not endorse any commercial endeavor, some commercial sites may be included as hypertext links if they can provide resources language learners may wish to purchase on their own. This site is an example of an on-line music and video store where the student can view and listen to free samples, as well as purchase personal materials.

<http://www.wrn.org/ondemand/ondemandtext.html>

OnDemand Audio. Through OnDemand, the user may listen to the hour long “Voice of Russia” radio news program broadcast from Moscow on a daily basis. This audio show is available in either English or Russian, and can be listened to at any time, from nearly anywhere.

<http://www.lingnet.org/home.htm>

LingNet—the Linguists Network. This site, provided by the Defense Language Institute, contains a very extensive list of hypertext links to a wide variety of language resources in many languages, including Russian. Military members may also register on this site and discuss language learning issues (in English) in the chat room or on the discussion list provided.

<http://www.webtv.ru/intlevision/>

Intlevision. This site broadcasts over fifty television channels in near-real time, including both Russian and English channels, as well as channels from a few other countries.

<http://www.orst.edu/dept/is/ruslit/>

Online Russian Library at Oregon State University. This site includes a plethora of downloadable Russian books and short stories, as well as links to Russian newspapers and music of all genres.

<http://tres.econlab.arizona.edu/>

The University of Arizona Computer Aided Instruction Group. On this site, the user may read a Russian text, then answer questions about the reading in either cloze or multiple choice format. The site also includes some basic grammar lessons.

<http://www.scola.org/>

SCOLA Home Page. As mentioned earlier in this paper, this site broadcasts news programs daily in near-real time from many countries, including Russia.

Bibliography

Air Force Foreign Area Officer Program Home Page. (Feb 1, 1999). [World Wide Web site]. Air Force FAO/Language Proponent Office. Available: <http://www.hq.af.mil/af/saf/ia/afao/fao/index.htm> [May 28, 1999].

Air Force Instruction 36-2605. (17 June, 1994). United States Air Force. Available: <http://afpubs.hq.af.mil/pubsforms/pubs/af/36/36260500/36260500.pdf> [May 30, 1999].

Armstrong, K. M., & Yetter-Vassot, K. (1994). Transforming Teaching through Technology. *Foreign Language Annals*, 27(4), 475-486.

Bachman, L. F. (1987). *Problems in Examining the Validity of the ACTFL Oral Proficiency Interview*. Paper presented at the Symposium on the Evaluation of Foreign Language Proficiency, Indiana University, Bloomington, Indiana.

Bachman, L. F. (1990). *Fundamental Considerations in Language Testing*. Oxford: Oxford University Press.

Bailey, E. K., & Cotlar, M. (1994). Teaching via the Internet. *Communication Education*, 43(2), 184-193.

Baugh, I. W., & Baugh, J. G. (1997). Global Classrooms--E-Mail Learning Communities. *Learning & Leading with Technology*, 25(3), 38-41.

Beauvois, M. H. (1992). Computer-Assisted Classroom Discussion in the Foreign Language Classroom: Conversation in Slow Motion. *Foreign Language Annals*, 25(5), 455-464.

Berge, Z. L. (1994). Electronic Discussion Groups. *Communication Education*, 43(2), 102-111.

Bialystok, E. (1981). The Role of Conscious Strategies in Second Language Proficiency. *Modern Language Journal*, 65(1), 24-35.

Blyth, C. S. (1998). *Untangling the Web: St. Martin's Guide to Language and Culture on the Internet*. New York: St. Martin's Press.

Buck, K., Burns, H., & Thompson, I. (Eds.). (1989). *The ACTFL Oral Proficiency Interview Tester Training Manual*. Yonkers, NY: ACTFL.

Byrnes, H. (1987). *Features of Pragmatic and Sociolinguistic Competence in the Oral Proficiency Interview*. Paper presented at the Symposium on the Evaluation of Foreign Language Proficiency, Indiana University, Bloomington, Indiana.

Campbell, R., & Wales, R. (1970). The Study of Language Acquisition. In J. Lyons (Ed.), *New Horizons in Linguistics*. Harmondsworth, England: Penguin Books.

Canale, M. (1983). From Communicative Competence to Communicative Language Pedagogy. In J. Richards & R. Schmidt (Eds.), *Language and Communication*. London: Longman.

Canale, M., & Swain, M. (1980). Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing. *Applied Linguistics*, 1, 1-47.

Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, MA: M.I.T. Press.

Chun, D. M. (1994). Using Computer Networking to Facilitate the Acquisition of Interactive Competence. *System*, 22(1), 17-31.

Clark, J. L. D., & Clifford, R. T. (1987). *The FSI/ILR/ACTFL Proficiency Scales and Testing Techniques: Development, Current Status, and Needed Research*. Paper presented at the Symposium on the Evaluation of Foreign Language Proficiency, Indiana University, Bloomington, Indiana.

Cohen, M., & Riel, M. (1989). The Effect of Distant Audiences on Students' Writing. *American Educational Research Journal*, 26(2), 143-159.

Colomb, G. G., & Simutis, J. A. (1996). Visible Conversation and Academic Inquiry. In S. C. Herring (Ed.), *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives* (pp. 203-222). Amsterdam: John Benjamins Publishing Company.

Falsetti, J., & Schweitzer, E. (1994). *SchMOOze University Home Page*, [Multiple Object Oriented interface]. The City University of New York. Available: <http://schmooze.hunter.cuny.edu:8888/> [Jun 10, 1999].

FLAMRIC. (1981). *Foreign Language Maintenance/Refresher and Improvement Course*. (August 1981 ed.). (Vol. 1-29). Presidio of Monterey, California: Defense Language Institute, Foreign Language Center, Distance Education Division.

Fox, G. (1998). The Internet: Making it Work in the ESL. *The Internet TESL Journal*, IV(9).

Frizzler, K. (1995). *The Internet as an Educational Tool in ESOL Writing Instruction*. Unpublished Master's Thesis, San Francisco State University, San Francisco.

Garza, T. J. (1998). *Tuchi: Video Laboratory Exercise*. University of Texas at Austin: Department of Slavic Languages and Literatures.

Hymes, D. (1972). On Communicative Competence. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics*. Harmondsworth, England: Penguin Books.

Jacobs, D. J. (May 18, 1999). *Most Investors Have Used the Internet*, [World Wide Web site]. Gallup Polls. Available: <http://www.gallup.com/poll/releases/pr990518b.asp> [May 30, 1999].

Jacobson, M. J., & Spiro, R. J. (1995). Hypertext Learning Environments, Cognitive Flexibility, and the Transfer of Complex Knowledge: An Empirical Investigation. *Journal of Educational Computing Research*, 12(4), 301-333.

Kern, R. G. (1995). Restructuring Classroom Interaction with Networked Computers: Effects on Quantity and Characteristics of Language Production. *Modern Language Journal*, 79(4), 457-476.

Korenman, J., & Wyatt, N. (1996). Group Dynamics in an E-Mail Forum. In S. C. Herring (Ed.), *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives* (pp. 225-241). Amsterdam: John Benjamins Publishing Company.

Kroonenberg, N. (1994). Developing Communicative and Thinking Skills via Electronic Mail. *Tesol Journal*, 4(2), 24-27.

L-SOFT list server at The City University of NY. (May 11, 1999). *Welcome to TESL-L!* (version 44), [e-mail discussion list] [May 24, 1999].

Lee, L. (1997). Using Internet Tools as an Enhancement of C2 Teaching and Learning. *Foreign Language Annals*, 30(3), 410-427.

Levy, S. (Dec. 25, 1995). The Year of the Internet. *Newsweek*, 26-30.

Lunde, K. R. (1990). Using Electronic Mail as a Medium for Foreign Language Study and Instruction. *Calico Journal*, 7(3), 68-78.

Ma, R. (1996). Computer-Mediated Conversations as a New Dimension of Intercultural Communication between East Asian and North American College Students. In S. C. Herring (Ed.), *Computer-Mediated*

Communication: Linguistic, Social, and Cross-Cultural Perspectives (pp. 173-185). Amsterdam: John Benjamins Publishing Company.

Mello, V. (1998). Report on a Penpal Project, and Tips for Penpal-Project Success. *The Internet TESL Journal*, IV(1).

Oliva, M., & Pollastrini, Y. (1995). Internet Resources and Second Language Acquisition: An Evaluation of Virtual Immersion. *Foreign Language Annals*, 28(4), 551-563.

Omaggio Hadley, A. (1993). *Teaching Language in Context*. (2nd ed.). Boston, Massachusetts: Heinle & Heinle.

Paramskas, D. (1993). Computer-Assisted Language Learning (CALL): Increasingly Integrated into an Ever More Electronic World. *Canadian Modern Language Review*, 50(1), 124-143.

Rankin, W. (1997). Increasing the Communicative Competence of Foreign Language Students Through the FL Chatroom. *Foreign Language Annals*, 30(4), 542-546.

Riel, M. M., & Levin, J. A. (1990). Building Electronic Communities: Success and Failure in Computer Networking. *Instructional Science*, 19(2), 145-169.

Salaberry, M. R. (1996). A Theoretical Foundation for the Development of Pedagogical Tasks in Computer Mediated Communication. *Calico Journal*, 14(1), 5-34.

Savignon, S. J. (1983). *Communicative Competence: Theory and Practice*. Reading, MA: Addison-Wesley Publishing Company.

SCOLA. (May 24, 1999). *SCOLA Home Page*, [World Wide Web site]. Satellite Communications for Learning (SCOLA). Available: www.scola.org [May 30, 1999].

Sheffner, M. (1999). *RE: Request for Internet Research*, [personal e-mail communication]. [May 25, 1999].

Supinski, S. (1999). Russian Language Maintenance Program Test: Working Papers. United States Air Force Academy: Colorado Springs, CO.

Valdman, A. (1987). *Introduction*. Paper presented at the Symposium on the Evaluation of Foreign Language Proficiency, Indiana University, Bloomington, Indiana.

Vygotsky, L. S. (1962). *Thought and Language* (Eugenia Hanfmann, Gertrude Vakar, Trans.). Cambridge, MA: M.I.T. Press.

Warschauer, M. (1995a). Comparing Face-to-Face and Electronic Discussion in the Second Language Classroom. *Calico Journal*, 13(2-3), 7-26.

Warschauer, M. (1995b). *E-Mail for English Teaching: Bringing the Internet and Computer Learning Networks into the Language Classroom*. TESOL Publications: Alexandria, VA.

Warschauer, M. (1997). Computer-Mediated Collaborative Learning: Theory and Practice. *Modern Language Journal*, 81(4), 470-481.

Zhao, Y. (1996). Language Learning on the World Wide Web: Toward a Framework of Network Based CALL. *Calico Journal*, 14(1), 37-51.

Vita

Susan Mackey Valentine was born in Independence, Missouri on January 21, 1966, the daughter of Jerry Edwin and Joan Marie Mackey. After graduating from Truman High School, Independence, Missouri, she entered William Jewell College in Liberty, Missouri. In May 1988, Ms. Valentine received the degree of Bachelor of Science in Music Education. At the outbreak of Desert Shield/Storm in 1991, she enlisted in the United States Air Force, serving as a Russian Cryptologic Linguist until attending Officer Training School. Upon graduation in January 1995, Ms. Valentine was commissioned as a Second Lieutenant. Captain Valentine is currently serving on active duty as an Instructor of Russian at the United States Air Force Academy in Colorado Springs, Colorado.

Permanent address: 3820 Marion
Independence, Missouri 64055

This thesis was typed by the author.